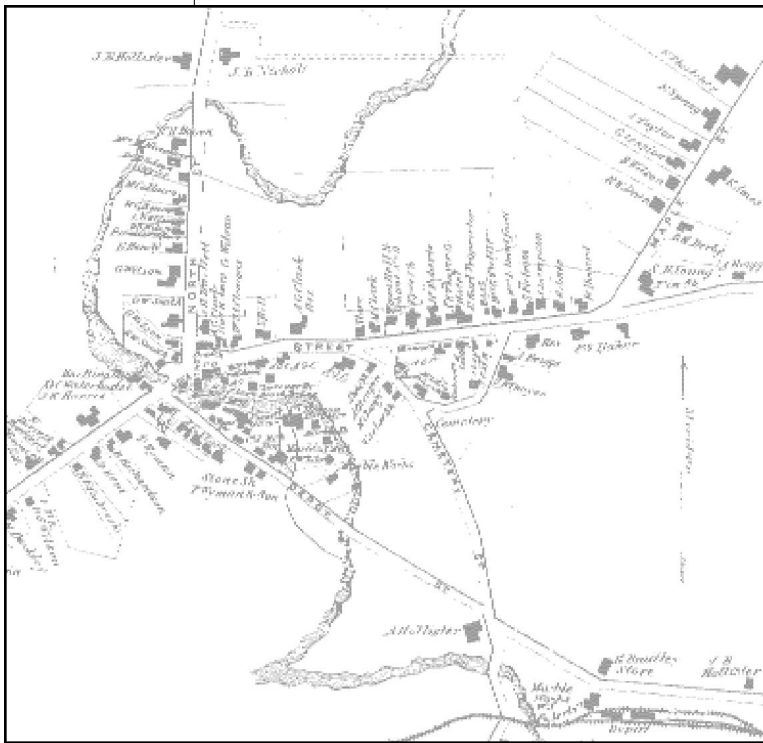


Design Guidelines *for* MANCHESTER'S COMMERCIAL AND HISTORIC DISTRICTS



prepared for

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Manchester, Vermont

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“The Town of Manchester seeks to maintain and enhance those aspects of the built environment that contribute to our unique character and historic heritage.”

Premise and Purpose

The Town of Manchester has a long history of dealing with land use and development issues. Growth and development, especially in the downtown, have dominated public discussion and the political landscape for decades. As pressures have increased, the Town has taken many pro-active steps to shape land development into patterns that help maintain and enhance the unique, historic heritage of this community. Two of the most significant regulatory tools were the adoption of Design Review for our commercial and historic districts, and Major Development Review. Since the mid- to late-1980's, these two bylaws have certainly influenced the look and feel of Manchester as we know it today, and have moderated outside market forces that would have created very different results.

Other, non-regulatory tools which have helped to clarify community goals and forge positive outcomes include the 1994 Community Vision Statement, the 1996 Commercial District Parking and Pedestrian Plan, and the 1997 Town Plan. Each document (and the public processes leading to the creation of each document) helped community thinking evolve from a pure "command and control" approach to development to a system that is still rooted in a firm regulatory foundation, but which is also tempered by guidance, encouragement, and incentive to achieve community goals.

Design Review began, and continues today, with a series of statements about what we will review: building design, rooflines, materials, and the like. As the community gained collective experience with the process, and through efforts such as the Parking & Pedestrian Plan, we have learned how to better articulate what works for Manchester, rather than simply stating what we wish to avoid. By communicating more clearly with landowners as to preferred land use patterns and architectural designs, we can work together to

improve our community. Note that while site and design elements are described individually for clarity and simplicity, it is equally important to consider the interaction between elements. Done well, a synergy emerges that is truly more than the sum of the parts.

“Design Review is one of the most powerful tools we have as a community.” –Lee Krohn

Moving forward in time, the 1997 Town Plan helped further the use of illustrations and guidelines to clarify desired outcomes. We thought it important to provide guidance for what we'd like to see on the ground when buildings and sites are developed, upgraded, or rehabilitated.

These Design Guidelines are a natural step forward in that process. The intent is to provide greater clarity and guidance to citizens, landowners, and reviewing Boards about community goals and standards for architectural

design, historic preservation, sign placement and design, and site and streetscape design. The emphasis here is on guidance, not requirements. This is not a binding regulatory document, nor is it a mandate for the use of any specific types of designs or materials. However, these Guidelines will serve their purpose where they help to clarify the range of choices for designs, patterns, or materials, so that renovations, rehabilitation, infill, and new development may be of a style and pattern that reinforces our historic heritage, strengthens the community's character, and enhances Manchester's vitality and economy in the long run.

GOALS ...represent shared visions which govern physical design and development

The primary goals of this Guideline document for Manchester are:

- To preserve historical precedence, reflect tradition

- To build on current architectural and landscape patterns that fit the context of community character

- To sustain and enhance the outstanding and valued physical attributes of the design review districts (and Manchester as a whole)

PRINCIPLES ...are the values and concepts which reflect and further the goals

These principles of design follow the previously stated goals in that they strive to promote the positive patterns of the district(s) and help achieve meaningful spaces that function well and are aesthetically pleasing.

Respect natural assets. Blend human development with existing topography and vegetation. Nurture existing vegetation, especially mature trees. Pay careful attention to native species. Maintain views and access to the river.

Protect and enhance the landscape. Preserve and enhance established tree lines along streets. Encourage landscaping that creates green space between streets, sidewalks and buildings, and incorporates shade trees.

Promote contextual design. Encourage architectural design that complements the New England tradition and responds to the historic qualities of its surroundings, but is creative in its own approach.

Provide for the comfort and safety needs of pedestrians in both commercial and residential areas, taking special consideration for children's safety. Enforce pedestrian oriented design in the classic "village" style and human scale. Maintain "a carefully designed network of attractive sidewalks, walkways, and bicycle paths..." to encourage pedestrian circulation in favor of the automobile and to ultimately help ease traffic congestion.

Make accommodations for automobiles. Allow for plenty of parking spaces, but avoid buildings as islands in a sea of parking. Decrease visibility of parking lots whenever possible.

Support functional and safe vehicular circulation. Create the means for logical and comfortable vehicular circulation by reducing the number of curb cuts. Consider alternative vehicular routes; improve infrastructure and off-street links between parking lots.

Maintain and enhance the visual landscape: "Lighting will be soft in nature yet sufficient for safety and security. Fixturing will be attractive and decorative. Signs will be strictly controlled to protect the aesthetics and individuality of the town." Hide dumpsters and advocate for burial of overhead utility lines.

(All quotes are from the Manchester Vision Statement)

PATTERNS ...are physical planning and design examples which illustrate and implement the goals and principles.

The guidelines formulated in this document are presented in a series of patterns for buildings and sites.

Survey Says...

To help begin the process of developing a set of design guidelines for Manchester, the Town set out to hear the opinions of folks in the community. The survey asked questions about what buildings or places people like or don't like, what they think works and what doesn't, and which part of downtown or historic areas they'd like to stay "as is" and what parts need the most improvement.

A brief summary of the general trends and themes is as follows.

Favorite Streets: Main Street, Bonnet Street; architecture, history, streetscape elements (greenspace, street trees, sidewalks)

Favorite buildings: Factory Point National Bank, Northshire Bookstore, Baptist Church, Zion Church, Quality Restaurant, former News Guide & Colonial Theater buildings

Most Improved Areas: Main Street, the Depot, Town Green conversion, three new buildings at Town site, interconnected rear parking lots, Manchester Shopping Center

What to Keep: historic architecture, sense of place, Main & Bonnet Streets

What to Improve/Add: extend sidewalks, get rid of overhead power lines

Defining Characteristics: caring people and community, the views, the variety

High marks were also given to the Depot, the existing roundabout, the proposed roundabout, and strong planning & zoning to keep things under control and looking good.

Defining the Districts

The following are brief architectural descriptions of Manchester's commercial and historic districts. For more detailed architectural information on the historic districts please refer to Manchester's 1997 Town Plan. As currently configured, the Design Review District includes land within all of the Commercial and Transient Commercial zoning districts, and lands within the four historic districts identified in the Manchester Town Plan.

COMMERCIAL DISTRICTS

Depot Street

Leading east to Route 7 from the town core, Depot Street features buildings of many different eras, shapes, and siting strategies. Auto traffic tends to dominate this area due to the speed of cars on Depot Street, the scale of the parking lots, and the lack of pedestrian amenities.

The town green at the west end of Depot Street, proximity to the Battenkill River, and links to the Depot District are all features that might be drawn upon to improve the area's character. Overall, the street would benefit from more consistency in its architecture and more attention to the needs of pedestrians. The trio of newly developed buildings from 301-341 Depot Street suggests an approach to siting, scale, parking, and sidewalk enhancement that could, over time, greatly improve the appearance of the area if adopted by new development.

Route 7A South of the Junction

Route 7A South to Manchester Village lacks the architectural definition that the town's historic districts have. Great variety in building size, setback distance, and quality of renovations means that more consistent building patterns will need to be established before the street will gain its own architectural identity. New work in this area should be directed at enhancing the pedestrian environment, designing more discreet parking, drawing upon Manchester's architectural precedents, and ensuring that the spaces between buildings are not neglected. (See Building Pattern: Outdoor Room)

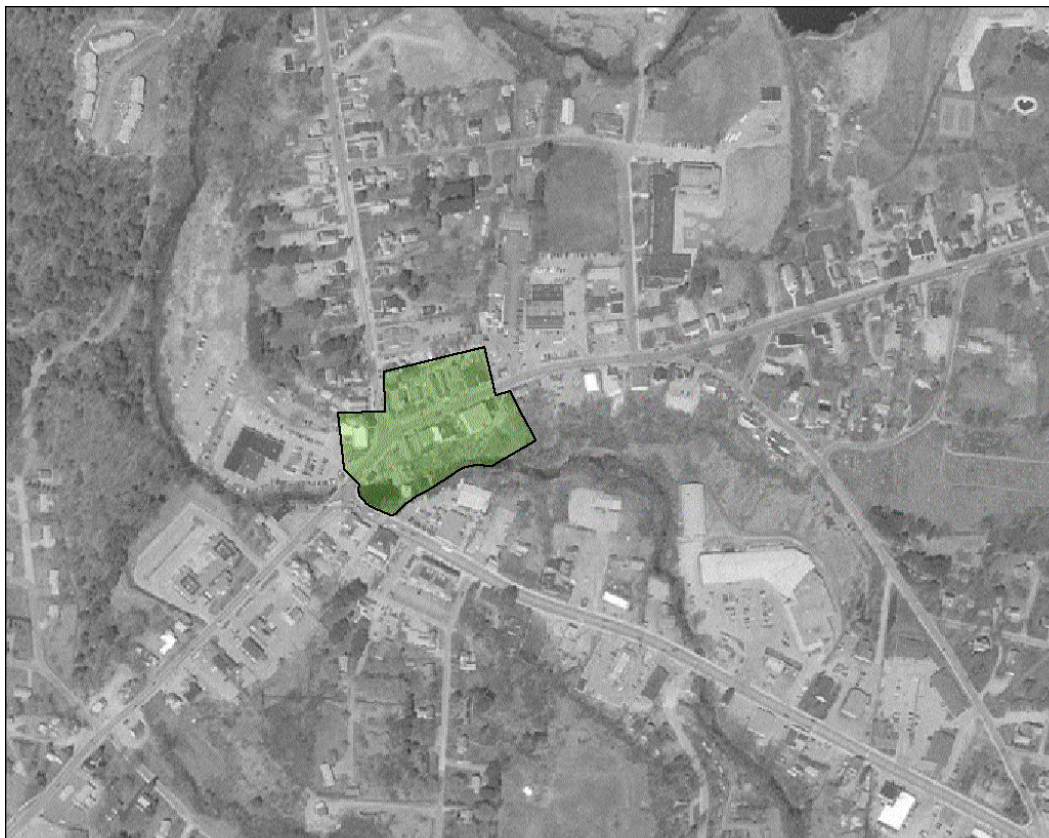
“We will encourage the preservation and restoration of historic buildings and districts.”

HISTORIC DISTRICTS

Historic Main Street

Historic Main Street is home to landmark buildings such as the Baptist Church, the Northshire Bookstore, and the Factory Point Bank Buildings. One special quality of this part of Main Street is that one's view terminates with a different significant building whichever direction one is traveling. One and two-story commercial buildings that line each sidewalk, though, set the architectural tone for the district. A strong line of building faces, street trees, benches, and shopfront windows make this a welcoming pedestrian environment near the intersection with Bonnet Street.

Further north, more recent development at Green Mountain Village and Rite Aid has set buildings back behind parking lots, eroding the established patterns. In the vicinity of Adams Park, however, a fabric of historic, residential-scaled buildings set behind modest lawns reestablishes a village character.

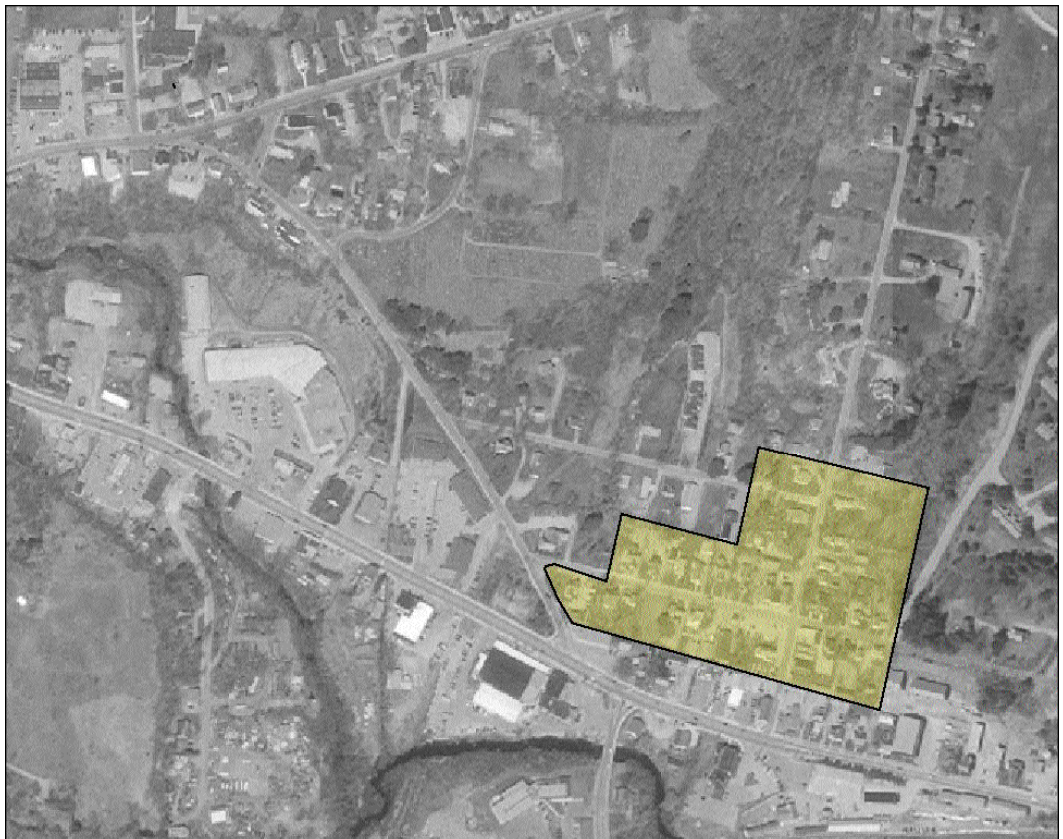


Photos of Main Street



Manchester Depot Historic District

Comprised mainly of Elm Street and Highland Avenue, the Depot District developed in the early years of the 20th century in response to the railroad and due to nearby processing of marble and wood. Consistency in setback from the street, common gable roof shapes, and size of the houses along Elm Street all help lend continuity to the district. Like Bonnet Street, the neighborhood today is marked by variety in the color of the houses and many of them have become offices. A series of closely spaced buildings at the intersection with Highland Avenue, the most prominent of which is the former Colonial Theater, visually anchor the neighborhood. This is a true mixed-use and pleasantly walkable area.



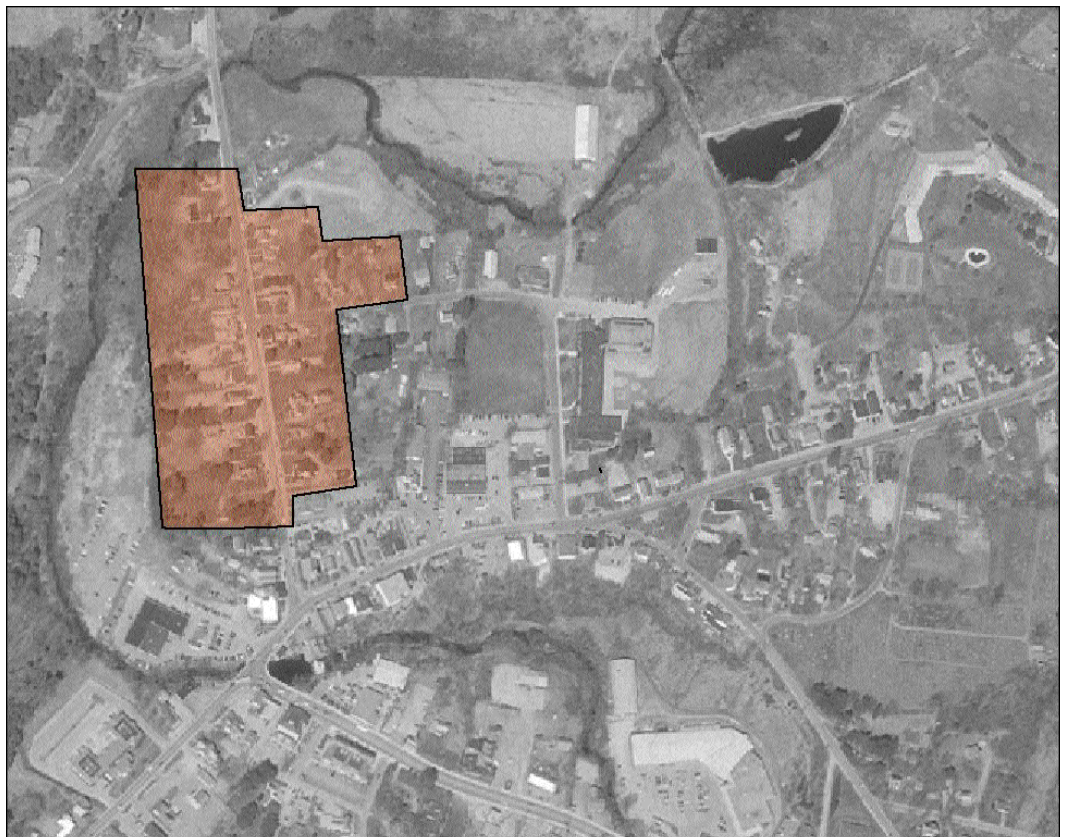
Photos of Depot Street



Bonnet Street Historic District

The historic section of Bonnet Street leads north from its intersection with Main Street. Houses from multiple eras line both sides of the road at regular intervals. Architectural styles date from the 19th and early 20th centuries and include Federal, Victorian, Italianate, and Bungalow. Despite the varied colors and architectural themes, the neighborhood remains architecturally cohesive for several reasons. Setbacks from Bonnet Street are relatively consistent, as is spacing along the street. Gable-shaped roofs and clapboards also help lend continuity from one property to the next. Level of detail in trim and building features is fairly regular, too.

The street has retained a residential character, in spite of the fact that many of the houses have become offices, because the outer appearance of the buildings has changed little. Business signs are small in size and lighting is unobtrusive. Finally, mature trees and landscaping throughout the neighborhood give it a settled, established character.

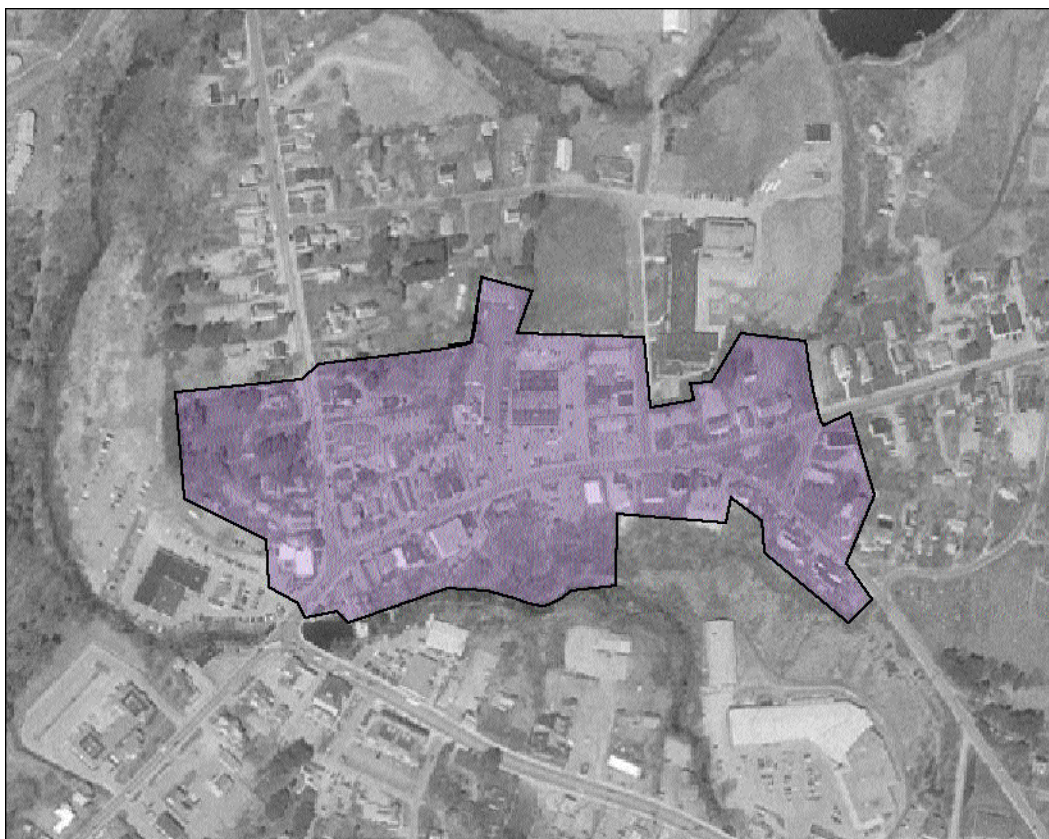


Photos of Bonnet Street



North Manchester Center Historic District

Extending along Route 7A north of the commercial core and Adams Park, the North Manchester Center Historic District is characterized by houses and small shops representing architectural styles dating from the late 18th century through the early 20th century. The street retains a residential flavor, though lacks the architectural cohesiveness seen, for instance, on Bonnet Street. Serving as an introduction to the town from the north, this district sets a tone for the character of Manchester Center.



Photos of North Manchester



Section 3

Design Principles and Patterns

Introduction to Principles & Patterns for BUILDING

The following design principles are intended to be an aid when designing or evaluating plans for new construction, renovations, or additions in Manchester Center's commercial and historic districts subject to design review. The architectural patterns deal largely with siting and the exterior appearance of buildings. Based on the features of many existing Manchester buildings, the patterns are also found in the architecture of other traditional New England towns.

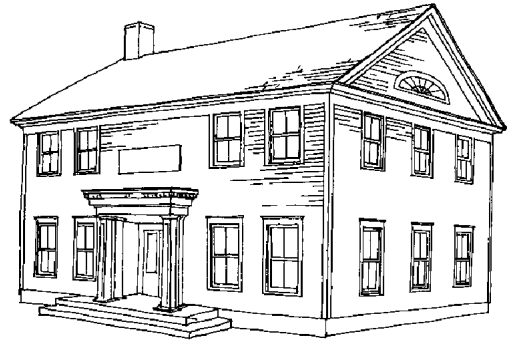
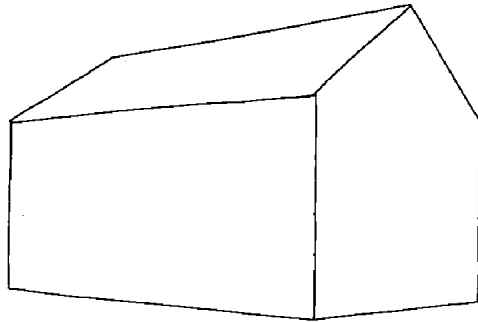
Many of the illustrations depict Manchester's older buildings and encourage designers to apply the principles embodied in them. The patterns are not intended to mandate simulations of historic buildings, but to help designers recognize those features that make Manchester's most treasured structures successful. Basic principles of good design are timeless and transcend any particular era or style.

New buildings should help preserve and reinforce the architectural character of each neighborhood and of the town as a whole. On certain sites the buildings next door may not be worth emulating. In such cases, and when design issues arise which are not directly addressed by the Building Patterns, designers are invited to study the established patterns elsewhere in the neighborhood and to complement the desirable features of that district's architecture. In those areas where the architectural fabric of a street is fragmented, new construction will need to set better standards for site planning and building scale which draw upon successful precedents elsewhere in town. It is hoped that the architectural strategies which follow will help keep Manchester a vibrant and attractive place, shape a more pedestrian-friendly environment, and improve the quality of life for Manchester residents and visitors alike.

In general, the design patterns for buildings address Footprints (see glossary), Massing (i.e. Form & Scale, see glossary), Siding, Roofing, Windows, Color and Architectural Details.

3.1

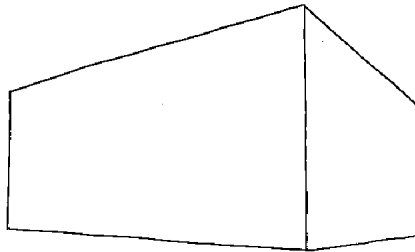
PATTERNS FOR BUILDINGS



Simple Shapes

Many of the finest buildings in Manchester have very simple basic shapes. Their richness of character comes from careful placement of windows, detailed trim, and the texture of their wall materials.

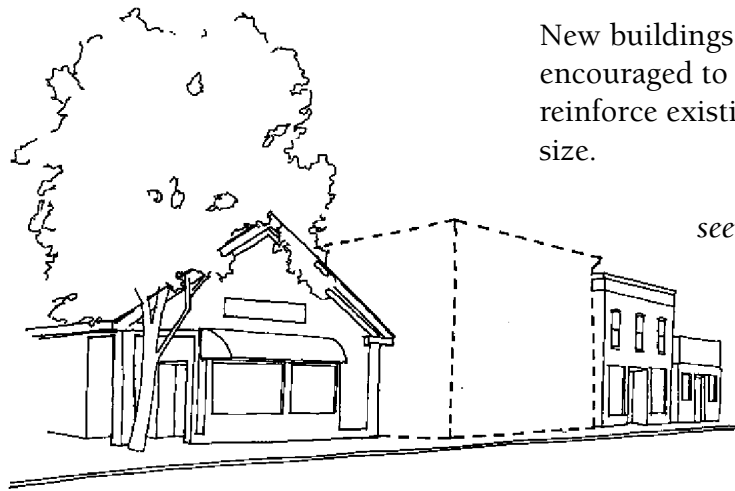
While dormers and other pop-out features can add interest to a building's form, overuse can make a building look cluttered. Try to allow a building's basic shape to be recognizable from any vantage point.



*illustration also shows:
Rhythm of Openings
Detail at Parapet
Commercial First Floor*

Appropriate Size

New construction should be respectful of neighboring buildings' height and massing. It is not necessary to match the height of adjacent buildings, but new structures should avoid overwhelming the scale of neighbors or appearing undersized amid larger buildings.

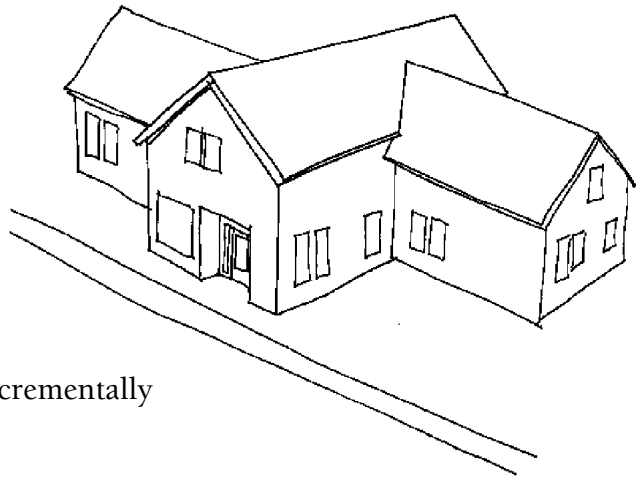


Hierarchy of Forms

Large buildings may be designed as an assemblage of smaller forms in order to help reduce the apparent scale of the new building.

Such a building may have the appearance of having grown incrementally over time.

When this strategy is used, ensure that there is one dominant mass, that it is closer to the street than the smaller forms, and that it has the primary entrance to the building.



Residential vs. Commercial Scale

New commercial buildings which are larger than a neighborhood's typical house in height or floor area should adopt features appropriate for a commercial building. For example, these may include larger-scaled windows and doors, tall friezes at the roof edge, or trim bands above the first floor level.

Small windows, residential-style porches, and dormers will likely appear out-of-place on a

see also:

Appropriate Size
Hierarchy of Form:

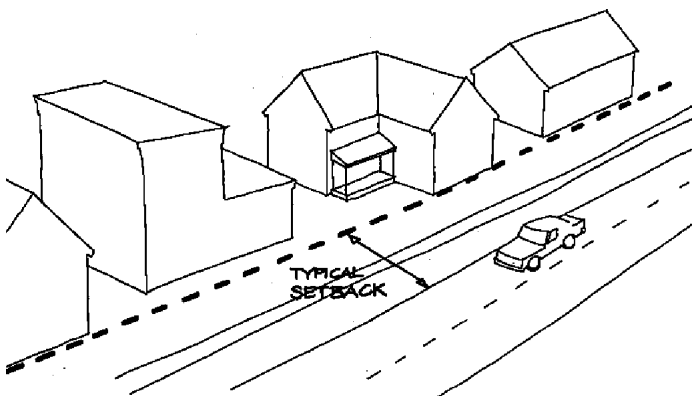


Respecting Setbacks

Site a new building in such a way that it conforms to its neighbors' typical setback from the street and so its facade is parallel to the street. This helps to maintain a consistent street edge and character in each neighborhood.

Note that setbacks vary between districts. Houses on Bonnet Street have moderately-sized front yards. Setbacks are less on Elm Street. Buildings on Historic Main Street start right at the sidewalk's edge. *Each environment feels comfortable because of the consistent patterns established.*

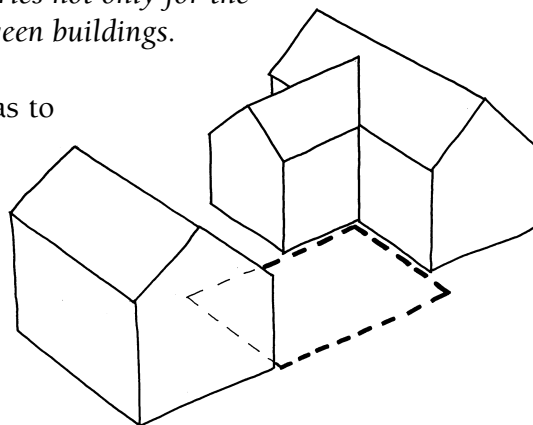
Depot Street presently has no identifiable common building setback. New buildings should adopt the setback of the buildings at 301-341 Depot Street to help create a more pedestrian-friendly environment at the street's edge.



Outdoor Rooms

The space between buildings is most useful and comfortable for pedestrians when it has an identifiable shape and corners. *When designing, think of the outer walls of a new building as boundaries not only for the indoor spaces, but also for the area between buildings.*

Siting and shaping a new building so as to create "outdoor rooms" is a design exercise that will help the building relate compositionally to its neighbors and make the surroundings a more appealing pedestrian environment.



Consider the path of the sun during the day and ensure that the space will not be shadowed when it should be in use.

The courtyard between the Factory Point Bank buildings on Main Street is a good local example of this principle.

Attractive Alleys

Attractively-developed alleys are one ingredient of walkable, appealing town centers. Consider how an alley can provide access to retail space or parking set back from the main street. Alleys, even if routes for vehicles, can be pleasant pedestrian spaces when developed with distinctive pavers, lighting, and architectural detail.

*see also: Outdoor Rooms
Ingredients of a Good
Pedestrian Space*

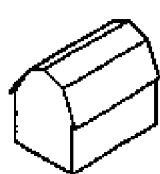


Roof Shapes

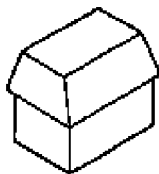
Gable and flat-roofed buildings predominate in Manchester Center's commercial and historic core and are favored on new construction.

The charm of the mansard-roofed Northshire Bookstore building is due, in part, to the fact that there is a strong architectural fabric of gable and flat roofs in the district which allows the bookstore to be a uniquely-sited and shaped landmark. While there are more examples of alternative roof shapes in town, these buildings depart from the established patterns which help lend continuity to neighborhoods.

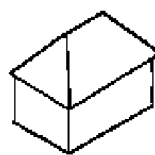
Flat roofs are suitable on single-story buildings only when attached to a multiple-story flat-roofed mass.



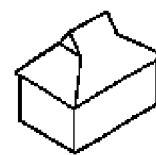
GAMBREL



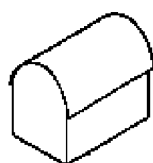
MANSARD



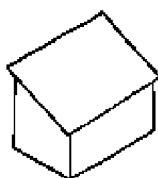
HIPPED



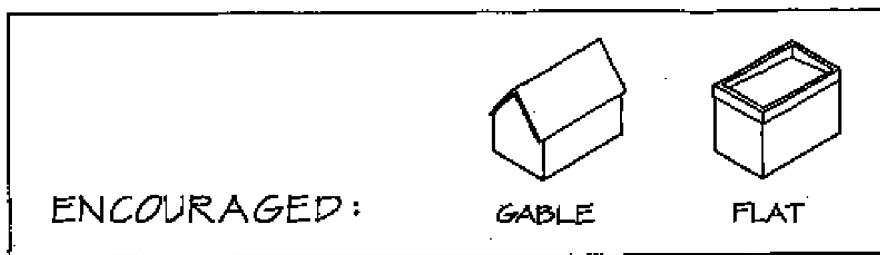
HIPPED -
GABLE



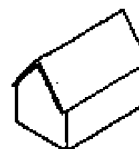
ARCHED



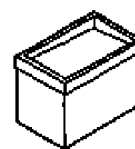
SHED



ENCOURAGED:



GABLE



FLAT

Roof Pitch

Manchester Center has a well-established fabric of gable-roofed buildings which exhibit moderate to steeply-sloped roofs. For new pitched roofs, a slope of 8:12 or greater is encouraged (except over porches).

Human-Scaled Architecture

“Human-scaled” is an architectural principle that refers to proportions of both building components and overall form. A building may be human-scaled even when several stories in height when the units of which it’s composed bear a relationship to the dimensions of the human body. Windows and doors are traditionally scaled to human size for ease of operation, passage, and fabrication. Bricks, clapboards, and shingles are units of building materials scaled for ease of handling by builders. Their dimensions and finished appearance subtly remind the viewer of the incremental process of building by hand. This is an important part of the appeal of Manchester’s older neighborhoods. Other elements that contribute to “human-scale” and create a level of comfort at the pedestrian level include porches, recessed entryways, bands of storefront windows, divided-light windows, and sensitively scaled signs and light fixtures.

A building that is not human-scaled is likely to be a poor fit in Manchester. Large expanses of glass, for example, or monolithic-appearing surfaces such as sprayed-on synthetic stucco can be disorienting to one’s sense of scale. Manchester already has a rich array of human-scaled buildings and new construction is encouraged to complement this pattern.

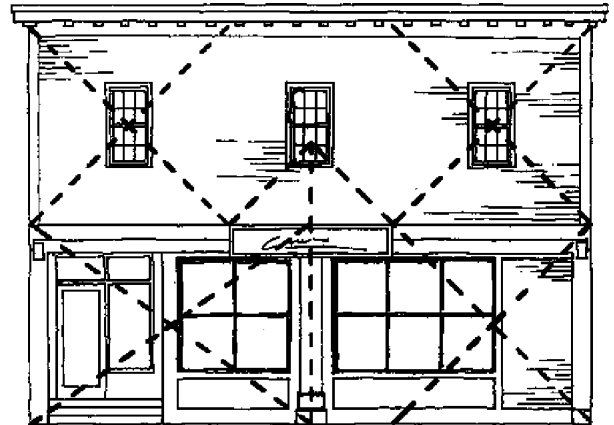


Organized Facade

Doors, windows, roof features, and surface details should be organized carefully as elements of a larger composition. The simple building below has carefully planned proportions. Superimposing diagonal lines on its facade shows that the horizontal trim band, building height, centerlines of windows, doors, and posts, and even the shop's sign are placed in precise relationship to each other.

This type of design creates a natural symmetry and order. However, it's not necessary for a building to be symmetrical in order for it to appear balanced and well-composed.

*illustration also shows:
Detail at Parapet
Commercial First Floor
Integrated Sign*

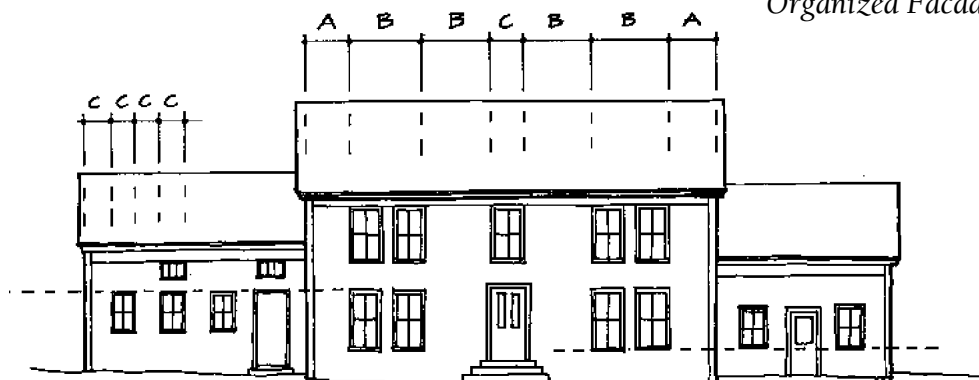


Rhythm of Openings

When planning sizes and locations for a building's windows and doors, think of the openings as part of a pattern on the face of a building. Windows may be grouped or spaced evenly, but ensure some correspondence in window placement from floor to floor.

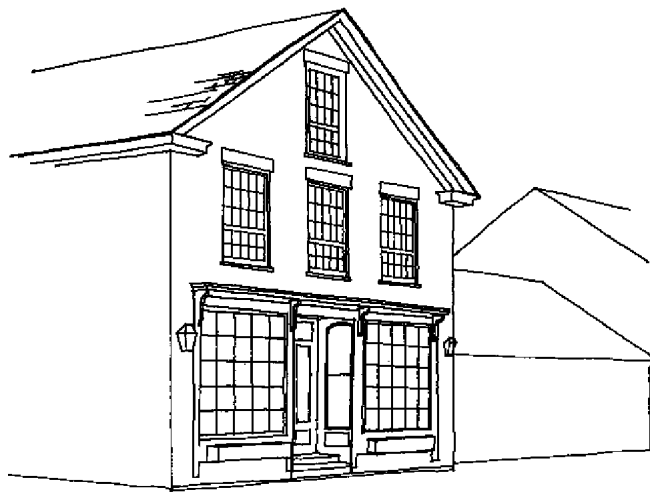
Commercial first floors in Manchester are often more glassy and open while upper floors have a greater proportion of solid wall to window. Work toward a balanced composition while, of course, being mindful of the daylighting needs of interior spaces.

*see also: Commercial First Floor
Organized Facade*



Commercial First Floor

For mixed-use or commercial buildings, consider giving the ground floor extra height appropriate for a public space and expressing that on the facade with larger windows and horizontal trim lines.



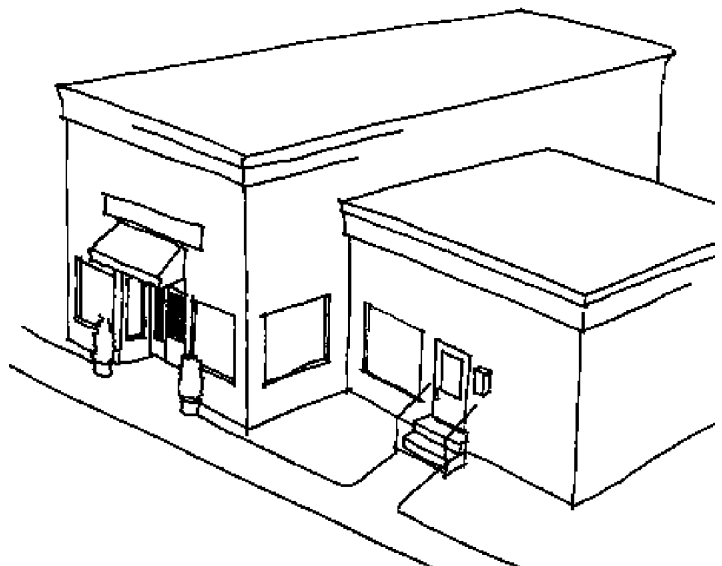
Upper floors may have smaller floor-to-ceiling heights and using smaller windows shows their more private nature.

*illustration also shows:
Entrance Detail*

Primary Entrance

When a business has multiple entrances, ensure that greater emphasis is placed on one primary entry. This entrance should face the street or an "outdoor room" seen from the street (see Outdoor Rooms guideline), and be identified by the sort of architectural devices described in the Entrance Details guideline, such as porches, awnings, and lights.

This pattern helps establish a clear front facade for a building.





Entrance Detail

Rely more on architectural features than on large signs to identify the entrance to a building.

Awnings or roofs for shelter, transom and/or side-lite windows surrounding the door, decorative lighting, door hardware, trim, and railings are examples of architectural details which help call attention to entrance doors. These details also help create a pedestrian-friendly transitional area between public and private space.

*see also: Transitional Zone
Shelter at Entry*

Transition Zone

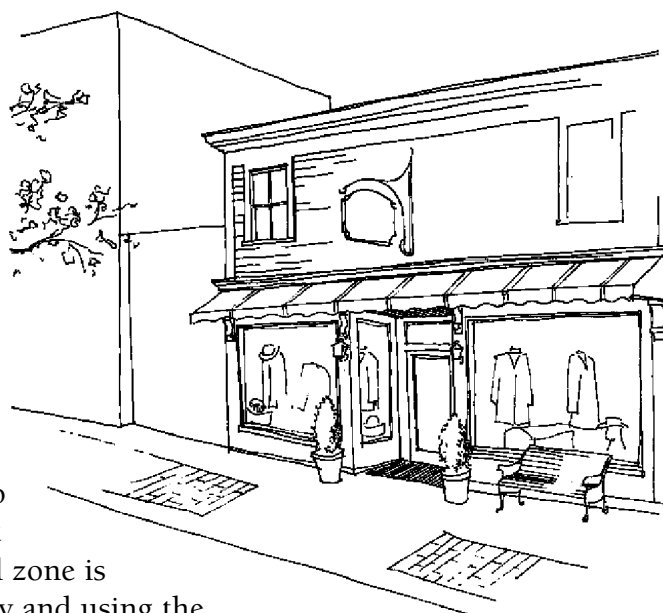
A comfortable walking environment in a commercial area requires some form of transitional space between the sidewalk and the shop interiors.

Shelter over the doorway is particularly important.

Even when a building has no setback, as in the example at right, an inviting transitional zone is created by recessing the entry and using the depth to either side for window displays.

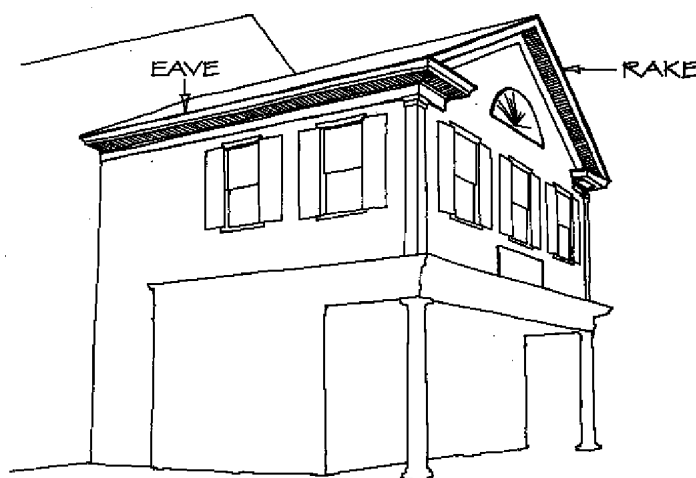
Other successful elements are the shop's awning, the change in pavement texture at the entrance, and amenities like the bench, planters, and decorative lighting beside the doorway.

*illustration also shows:
Entrance Detail
Integrated Sign
Commercial First Floor*

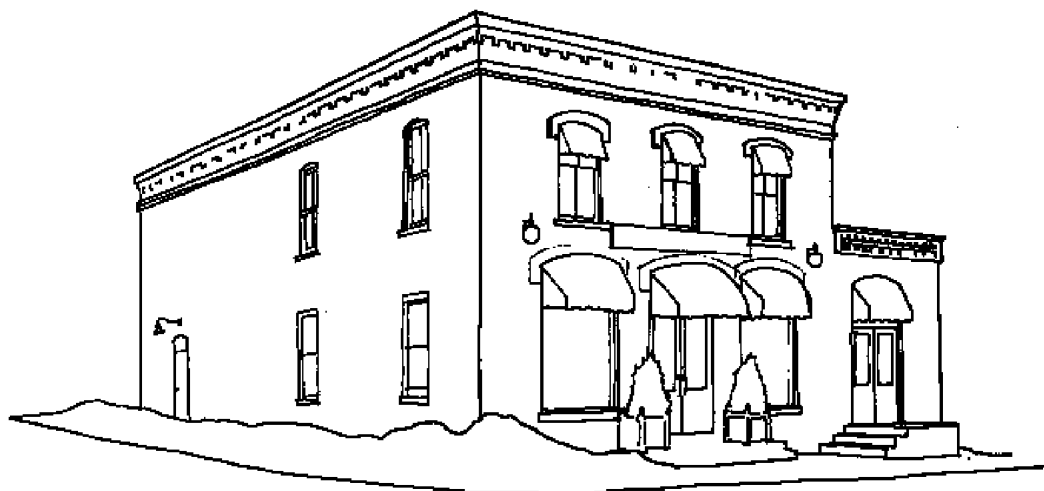


Roof Overhang

Overhanging eaves and rakes are common to Manchester's older buildings and are desirable features on new construction. Roof overhangs protect a building's walls, give a building a finished, sheltered look, and cast shadow lines that enliven the appearance of a facade.



Size of overhangs will vary with size of the building, but suggested minimums on pitched roofs are 12" for eaves and 8" for rakes.



Detailed Parapet

The parapets of flat-roofed buildings should have a decorative frieze, cornice, or three-dimensional detail. These features are intended to cap the exterior wall surface in a visually satisfying way by providing the type of textured details seen on older flat-roofed buildings in town.

Shelter at Entry

Consider the path rain and snow will follow when designing a new roof. Compose roof shapes so that building entries are sheltered from the elements.

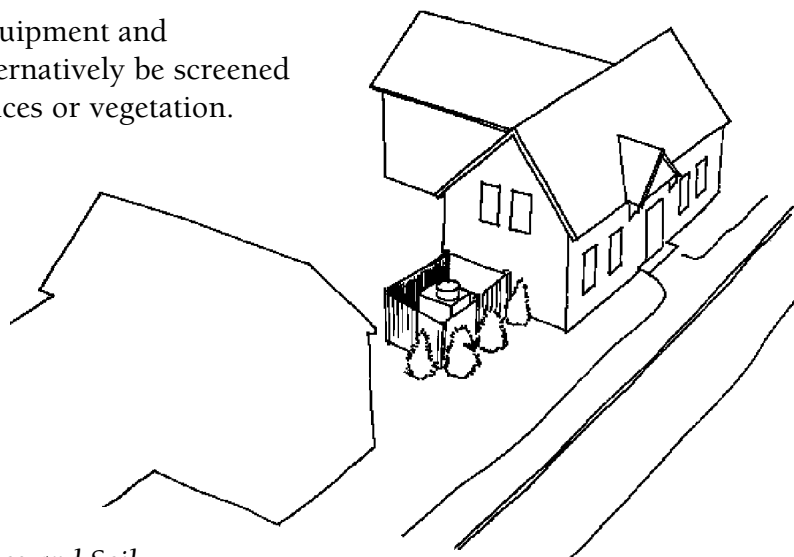


*illustration also shows:
Entrance Detail*

Conceal Mechanicals

Mechanical equipment should be shielded from public view, preferably on the rear side of buildings.

Ground-located equipment and dumpsters may alternatively be screened from view with fences or vegetation.



*see also:
Landscaping, Utilities and Soil*

Open Porch

Porches, whether new additions or on houses being converted, are best left open rather than walled-in.

Open porches act as a Transitional Zone (see pattern) for visitors and help lend a welcoming appearance to a neighborhood. One will also see the first floor of a house between the posts of an open porch and this helps the viewer's impression that the primary mass of the building is fronting the street (an established pattern for Manchester Center).

illustration also shows:

Columns

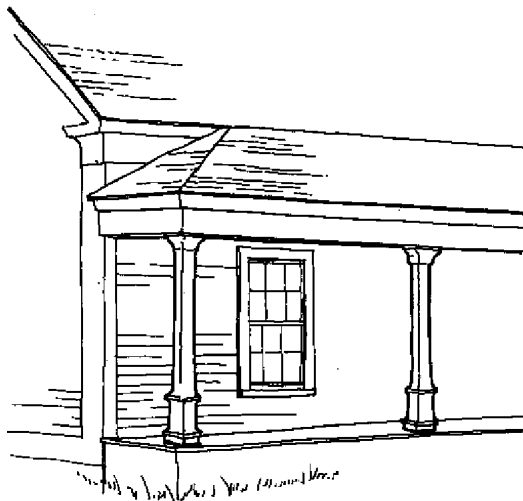
see also:

Hierarchy of Forms



Columns

Columns should be large enough to convey a sense of strength and support, and slender enough to be graceful. Smaller columns may be paired side-by-side to provide visual strength without bulk. Only in unusual circumstances, such as when supporting a two-story canopy, should a column be wider than a human torso.



Ideal horizontal spacing between columns is typically no greater than 1 1/2 times the height of each column, nor less than 3/4 of column height.

Columns should have distinct cap and base details, wider than the shaft, to give them a more finished look.

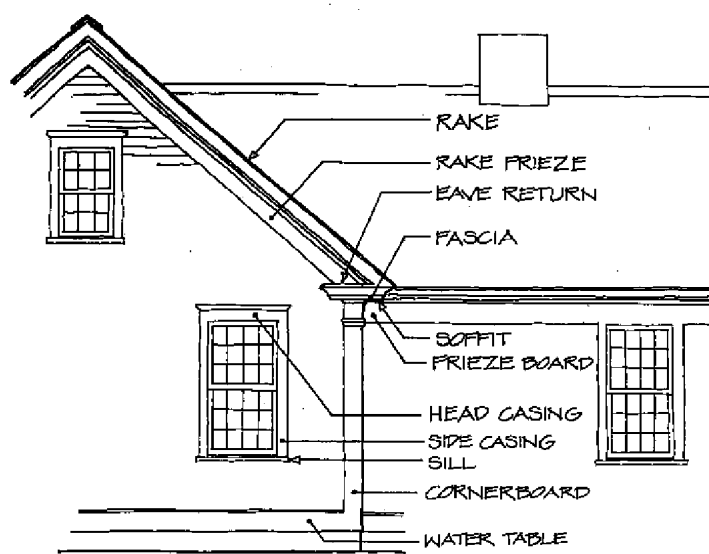
see also: Open Porch

Wooden Town

Wooden clapboards and trim are Manchester Center's most common type of siding and help to define the town's architectural character. Unlike some other Vermont towns, much of Manchester's commercial core is clapboard-sided including its landmark buildings. Vertical wooden siding, shingles, brick, and stone are less commonly seen on exterior walls.

Use of clapboards will help a new building or addition fit in with its surroundings.

Because it is a more "formal" material, brick in this setting may be more appropriately used for buildings at least two full stories in height.



Wooden Trim

Cornerboards, window casings, and frieze boards are recommended on buildings with horizontal siding or shingles. A full 1" thickness is appropriate for trim, a depth that will look substantial, throw subtle shadow lines for texture, and cover the ends of clapboards.

Corner boards and door casings should be greater width than window casings. Window and door head casings can be wider than side casings. Frieze boards should be larger than all other trim.

Ideal trim widths will depend upon a building's size, but the scale relationships described above hold true for any building.

Color: Wall and Trim

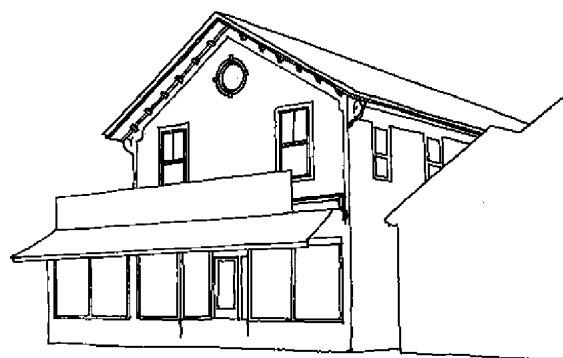
White siding and trim are traditional building colors in most New England towns, though Manchester Center is marked by more variety in color.

Manchester buildings which are not white or gray are typically light tones which can coexist comfortably with different colors on adjacent buildings. One should use restraint in choosing new building colors and consider compatibility with neighbors.

In general, wooden trim accentuates the architectural features of a building in a more subtle and pleasing way when there is only moderate or low contrast between siding and trim colors.

Color: Roof

Roofs, whatever their material, should be colored shades of gray or earth tones. This helps ensure that a building's facade will, rightfully, draw more attention than its roof.



Window Shape

There is strong precedent in Manchester for rectangular-shaped windows. In each building, even if window sizes vary, try to maintain consistency in window shape, proportion and trim in order to give a facade a more unified appearance.

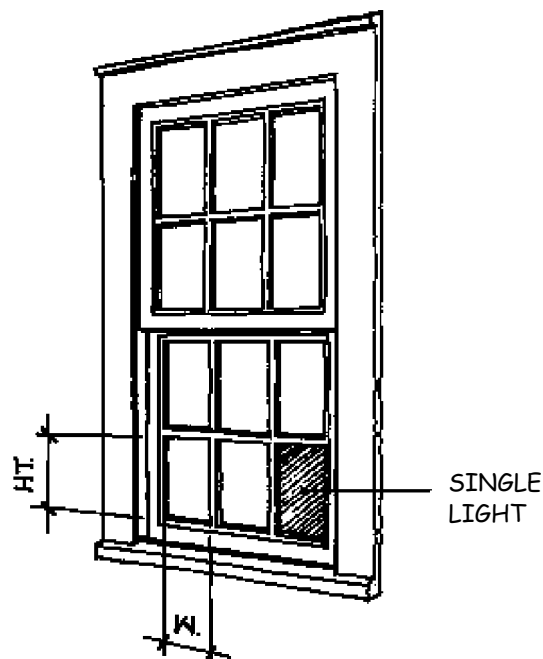
Windows of unusual geometric shape should be used sparingly, if at all. Such a window's best use would be as a small decorative element high in the gable end of a building. Manchester Center has many examples of this type of window placement.

*illustration also shows:
Wooden Trim*

Window Muntins

If muntins are part of a new window's design, "simulated divided lights" or true divided lights are favored rather than snap-in grilles for their more authentic appearance and durability.

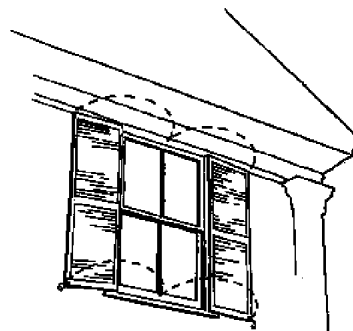
Lights of greater vertical dimension than horizontal are encouraged. Such proportions are more traditional for divided-light windows.



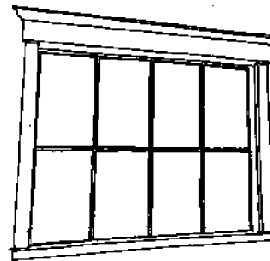
Shutters

Shutters, if used, should each be half the size of the window so as to completely cover the glass if closed, regardless of whether or not the shutters are operable.

Shutters which appear to be functional look more natural to the viewer.



RESIDENTIAL - SCALE
WINDOW WITH
APPROPRIATELY - SIZED
SHUTTERS



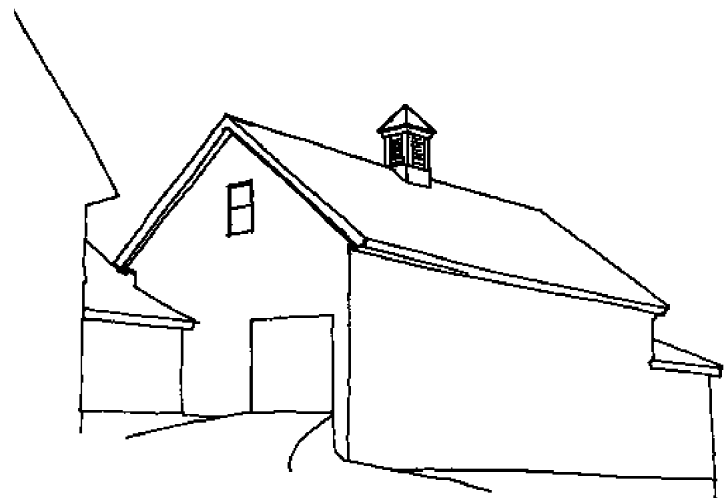
WIDE SHOPFRONT WINDOW
WHICH LOOKS BEST
WITHOUT SHUTTERS

Cupolas

Cupolas may be appropriate on buildings of barn-like scale that have non-residential detailing.

Cupolas, in the design stage, should be thought of as miniature buildings. They have the same compositional needs for overhanging roofs and substantial wooden trim that the main body of the building has (though overhangs may be smaller).

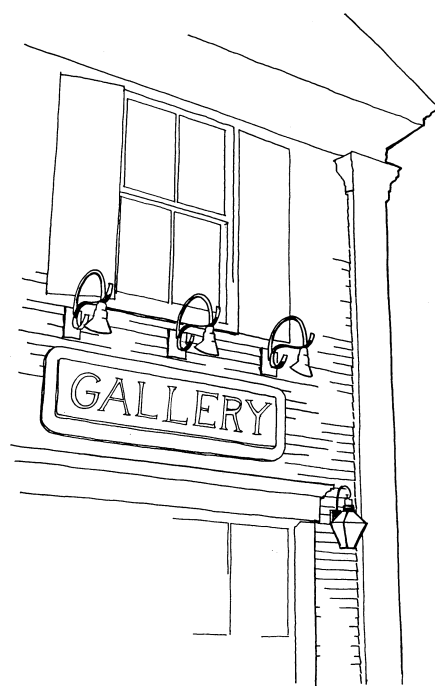
As with dormers and other roof features, be sparing in the application of cupolas and allow the primary form of the building to dominate.



Integrated Lighting

Exterior light fixtures, whether purely decorative or lighting a sign, should complement the architectural style and color of the building. Consider the fixtures as part of the facade's composition and locate them as thoughtfully as one would other architectural elements.

Fixtures should cast light only where needed to minimize glare, and be no brighter than necessary.



For detailed guidelines on light sources refer to the Site Patterns: Lighting which follow, and to the Town of Manchester Ordinances.

Integrated Signs

Signs should be architecturally integrated in a building's elevation. Whether signs are to be bracketed off the face of a building or mounted directly on the facade, plan for the placement of signs when designing an elevation so that they may be hung in logical spaces between windows or between floor levels. Avoid obscuring key architectural features of a building with signs.

Refer to the Site Patterns section of this document for guidelines on sign design. Refer to the Manchester Sign Ordinance for current rules regarding signs.

3.2

PATTERNS FOR SITE

Introduction to Principles and Patterns for SITE

The principles and patterns presented as part of Section 3.2 on Site provide references and recommendations for a wide variety of elements that are part of site design and development. As with the guidelines for buildings, this information is meant to guide both the design and evaluation of projects proposed for Manchester's Design Review Districts. The patterns presented are designed for application throughout the Districts, rather than providing specific solutions for specific locations. Note that landscaping and site elements are best planned for and designed on a site by site basis.

SITING

In siting a new building, topography, existing vegetation and other natural features should be incorporated into building placement and lot layout, with the least amount of disturbance possible. Preserving natural land features strengthens the unique quality of the landscape and can help avoid site problems associated with drainage and other sensitive issues.

Principle: reflect positive, successful, historical patterns on street in the district

Principle: create meaningful spaces for people

Principle: promote functional use and circulation patterns

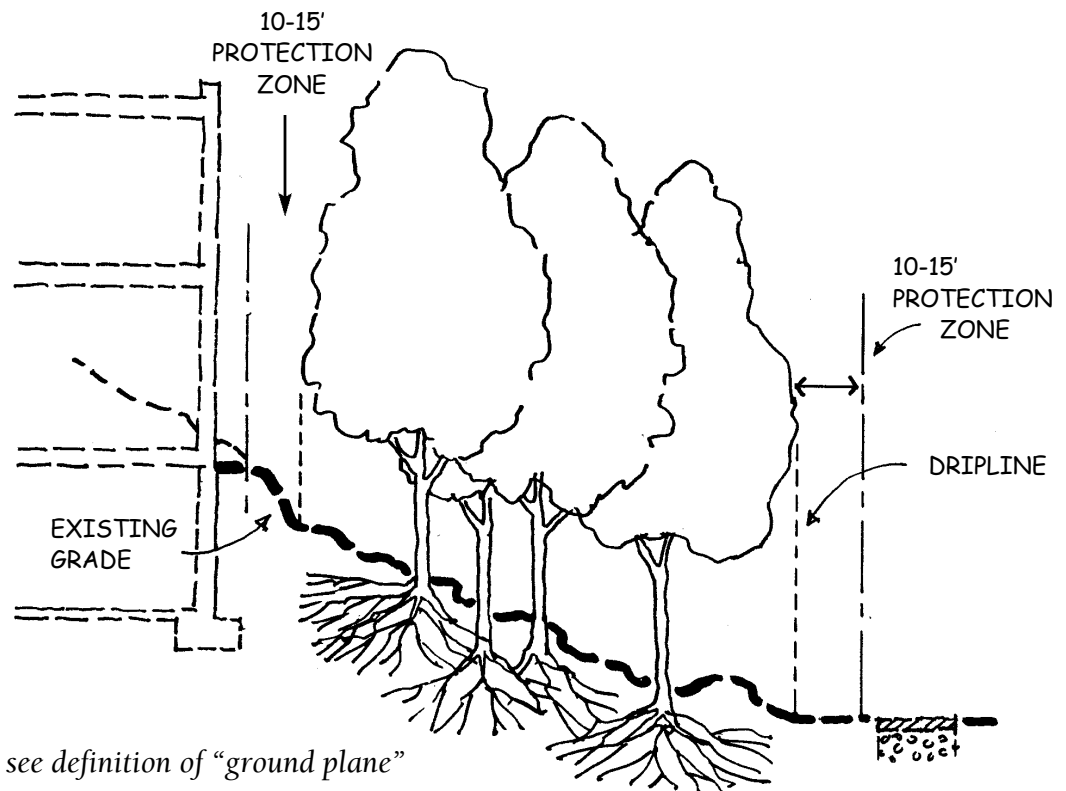
Siting Patterns:

- Use footprints and setbacks that reflect identified historic patterns or identified siting patterns that work well in a specific location, such as Main Street.
- Break up parking with buildings and landscape islands; employ rear access points
- Create ample pedestrian spaces between buildings and at entries
- Rely on extensive yet appropriate landscaping that uses hardy, native material

- Design landscape islands with proper dimensions to serve their function and to accommodate planting.
- Minimize the number of curb cuts and their widths as possible, integrating entries with other access points and streets rather than at random locations along the street.
- Locate buildings and infrastructure to minimize site disturbance, loss of vegetation and the amount of regrading required.
- Plan for infrastructure (see glossary) in an efficient and logical manner and anticipate future use and shared access to parking and utilities.

Design with Existing Vegetation

New buildings, paved areas and sidewalks should be sited to preserve existing vegetation. Existing trees should be protected in clumps with the ground plane intact and undisturbed.



LIGHTING

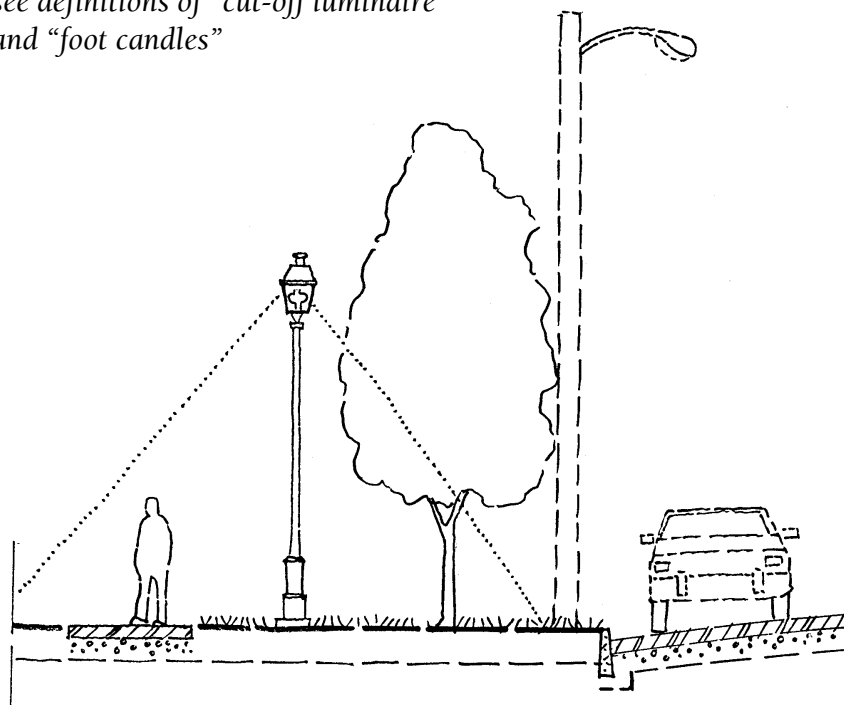
- Principle:* lighting should employ energy conserving fixtures coupled with housings and cut-off luminaries that direct the light only where it is needed.
- Principle:* lighting should not be excessively bright; rather it is necessary to maintain a consistent and uniform level of lighting for reliable visibility.
- Principle:* lighting design needs to recognize the value of the night sky by eliminating excess or unnecessary light and light scatter with fixture design and placement.
- Principle:* lighting installations should provide illumination levels suitable for the visual task or purpose intended and not create glare or unnecessary light spill.

Pedestrian Scale Lighting

When lighting pedestrian spaces and walks with decorative lighting only, basic “cut-off” technology can be used. Interference with street trees is not a problem on the street side.

A lower lamp post may be sufficient (12-14').

*see definitions of “cut-off luminaire”
and “foot candles”*

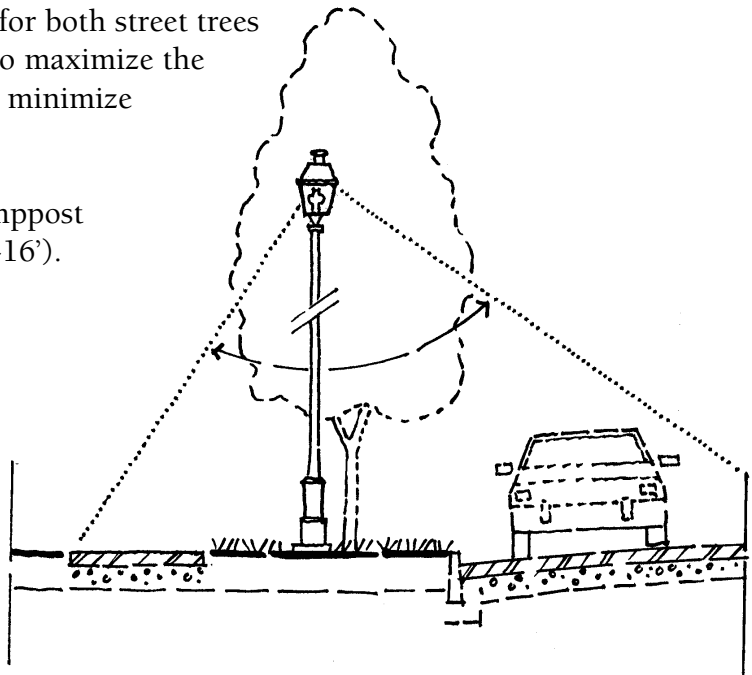


Decorative Lighting for Streets and Walks

When lighting streets and sidewalks with decorative, specific “cut-off” technology should be employed to ensure sufficient lighting levels for both street and sidewalk.

Streetscape planning should account for appropriate locations for both street trees and lighting fixtures to maximize the benefit of both and to minimize conflicts.

A taller decorative lamppost may be necessary (14-16’).



Lighting Patterns:

- Metal halide lamps and high-pressure sodium are the most energy efficient types of lighting. Metal halide provides superior color and atmosphere to the sodium/orange cast and is preferred as the primary lighting fixture.
- The lighting plan for any project may incorporate decorative, festive and special effect lighting. Special lighting needs to be considered on project by project basis and must take into account other issues such as light pollution and glare.
- It is desirable to achieve uniform levels of lighting when illuminating specific areas on a site such as parking lots, walkways, public spaces, drives. Where two sites share parking areas, drives, etc., lighting design and installation on both lots should be coordinated so as to maintain a uniform lighting level for both properties.

- The right light for the job matches recommended standards for wattage and/or footcandles

Recommended Guidelines for Lighting

This table provides a summary of established design standards for lighting applications in Manchester. It is important to note that recommended lighting levels differ depending on land use.

Lighting Application	Recommended Footcandle	Uniformity Ratio*	Lighting & Lamp Type	Recommended Mounting Height
Parking Lots	0.2 - 0.3	4:1	Metal Halide: Functional cut-off “shoe box” style or decorated lamp housings.	16' *
Collection Road	0.3 - 1.0	4:1	Metal Halide: Functional cut-off style lights.	16'
Streetscape (Downtown)	0.5 average	4:1	Metal Halide: Decorative cut-off style lights.	14'-16'
Walkways	0.1 - 0.2	4:1	Metal Halide or incandescent: Decorative post and lamp, or post / bollard mounted downtown light.	12' or 36" - 42" if on post or stairways.
Signs	1.0 - 3.0	2:1	Metal Halide or Incandescent: Ground or sign mounted & shielded.	As Required.

* 16' is the maximum height for mounting as per the Manchester Zoning Ordinance see definition of “Uniformity Ratio” in glossary.

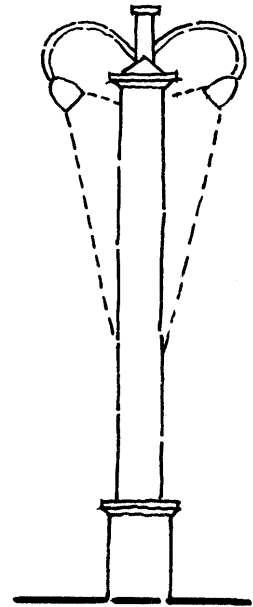
- Built-in lighting is efficient; as an example down-lighting eliminates glare and light spill to the night sky and is recommended for covered walkways and streetscape locations. Effective down-lighting engages and welcomes the visitor.
- Lighting types used shall reduce light pollution and employ designs which control directed light. Bare bulbs or direct light should not be visible to the human eyes.
- Low level post lights (30-42" high) with fixture incorporated into the post are an excellent way to direct light on pathways only.
- Fixtures and housing should employ shielded and directed lighting; lighting should not result in excessive shadows and high contrast bright areas versus dark areas.
- Cut-off lights can provide uniform light levels where needed; non-cutoffs contribute to light pollution.
- For individual project sites next to sites with appropriate lighting already in place, or side by side projects, consistent light level design and use of consistent product, housing and fixture type are recommended.
- Exterior light fixtures should be simple in design.
- Dark colored fixtures are generally preferred for pole mounted lights. Building mounted fixtures generally fit better if painted to match the building or background.
- Fixtures that are appropriate to the historic or contemporary designs and uses of the site should be used.
- Lights which produce a warm effect rather than a cool effect should be used.
- Incandescent and metal halide lights are appropriate.

See definitions of "cut-off luminaire" and "foot candles"
See bibliography for additional information on lighting.

Lighting Signs from Above

Sign mounted down lights are desirable because they focus light where it needs to be, and minimize, if not eliminate “light spill” and glare beyond the signboard itself.

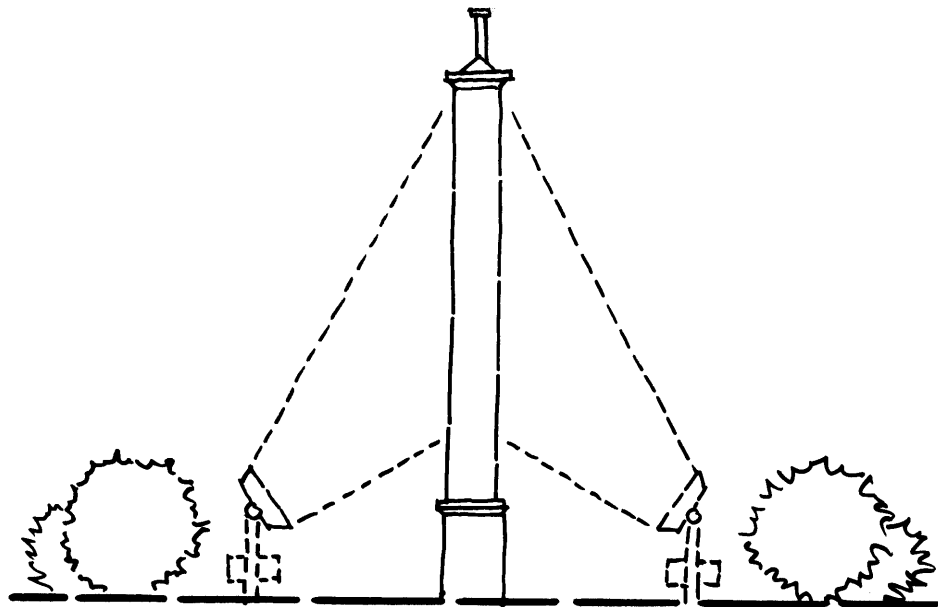
Lighting should be designed and mounted so as to fit the architecture of the sign.



Lighting Signs from Below

Shrubs hide and protect ground mounted light fixtures.

Lighting should be designed to illuminate only the signboard, limiting the “spill” of light beyond the sign surface and the potential for glare.



PARKING & CIRCULATION

Principle: promote safety, function and logical layout patterns

Principle: promote aesthetically appropriate parking environments

Principle: maintain small/moderate village scale and character in parking lot

Principle: to reflect goals set out in Parking and Pedestrian Improvements Plan

Patterns for Parking and Circulation

- The layout of entry roads and parking lot entrances and exits should provide adequate visibility for safe vehicular and pedestrian movement.
- Plan parking lots to avoid building in a “sea of parking” – use landscaped islands, walkways and buildings to break up expanses of asphalt.
- Parking should be creatively screened or located with minimal visibility to the street
- Proper island design should be used for spacing, placement and size.
- Promote maximum integration, circulation and parking stall layout to work for multiple contiguous parcels. This may be more involved than simple allowance of easements or a ROW.
- Provide adequate locations for snow removal/snow storage at the edges of a lot and in islands. Plan the landscaping accordingly.
- Pedestrian circulation should be logical, to reflect desire lines and "pooling" places for gathering and crossing traffic
- Landscape patterns include providing for sufficient growing space, selecting appropriate tree locations, installing sufficient and proper soil, and using hardy species that reflect the principle of using the right plant for the right place.

Pedestrian-Friendly Design

The term "pedestrian-friendly" is used frequently in these design guidelines and the principles it includes have been endorsed by the 1994 Community Vision for Manchester, the 1997 Town Plan, and the Manchester Commercial District Parking and Pedestrian Plan. A pedestrian-friendly environment is simply one that makes walking an appealing, safe, and efficient way to get around town. Reasonable provisions are made for driving and parking automobiles, but emphasis is placed on the quality of the pedestrian's experience with the goal of reducing gridlock and improving community life.

PEDESTRIAN CIRCULATION

Principle: provide for safety and function of pedestrian circulation patterns

Principle: integrate with existing and proposed pedestrian circulation routes

Principle: design aesthetically pleasing walks and paths

Patterns for Pedestrian Circulation

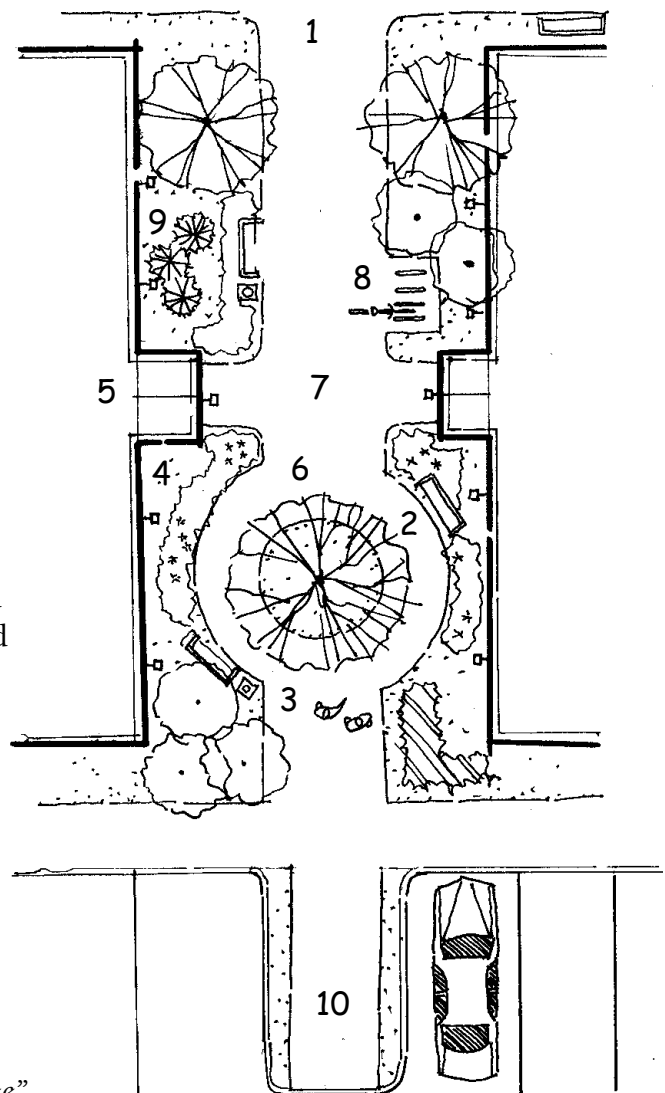
- Develop sidewalks, walkways, and paths with appropriate layout and design to accommodate pedestrian desire lines, access points and safe travel.
- Plan for circulation systems and routes, to include location of crosswalks and connections to other key destinations, adjacent or otherwise.
- Employ durable surface materials and sufficient sub-base preparation: brick, unit pavers, concrete or asphalt to be underlaid with 4-6" sand, 4-6" gravel and stabilization fabric.
- Incorporate accessibility and appropriate grades for pedestrian circulation. Sidewalks should be at a 5% grade or less, where feasible. Rely on ADA (Americans with Disabilities Act) Standards.
- Amenities to provide for pedestrian circulation

See definition of "specimen tree"

Ingredients of a Good Pedestrian Space

This plan shows how a space between buildings can be designed and developed to effectively serve pedestrian needs.

1. Well defined circulation within parking lot and to building entries.
2. Lots of benches with backs
3. Trash barrels
4. Building mounted area lights (focused down)
5. Well defined entry- roof sheds snow off of walk
6. Existing specimen tree protected
7. Ample circulation space
8. Bike racks are well placed and have appropriate ground surface
9. Extensive landscaping is employed to provide shade, color and interest in all seasons
10. Sidewalk access from parking lot islands

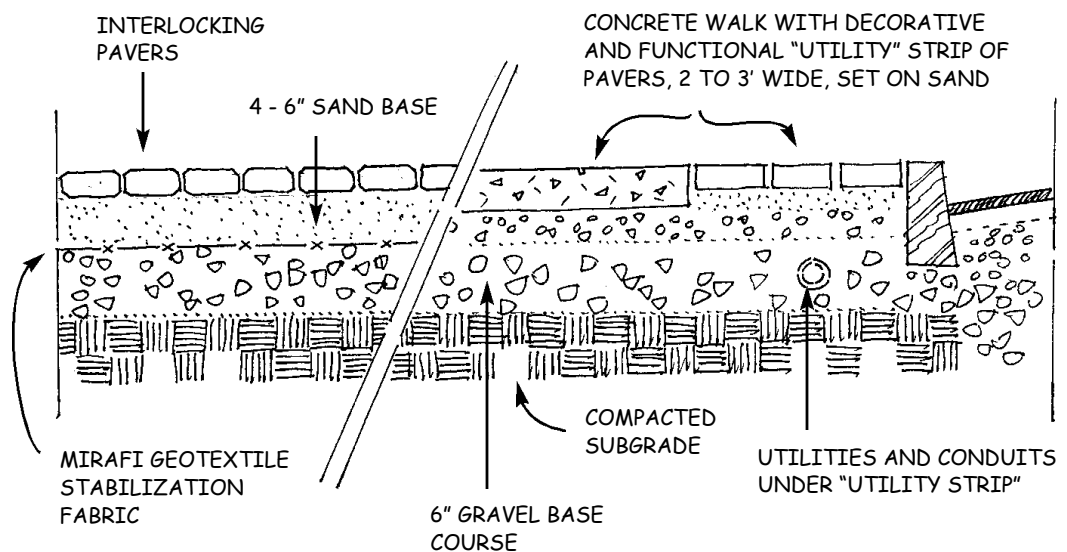


See definition of "specimen tree"

See also: Outdoor Rooms and Attractive Alleys

Design for Walkways and Sidewalks

A safe and comfortable pedestrian walkway has a minimum width of 5' and a maximum grade of five percent. Use of interlocking pavers is recommended to resist heaving. They need to be set on the proper sub-base for pedestrian walks and plazas. Stabilization fabric is recommended under the sand layer. Decorative paver edges/borders or utility strips can serve both aesthetic and functional purposes. Alternatives to pavers such as patterned and colored asphalt and concrete (such as "Streetprint" and "Bomanite") can be considered but must have a well designed and installed with sufficient sub-base and compaction. Basic concrete surfaces should be scored and have a rough or textured aggregate finish.



STREETSCAPE

Principle: employ designs that address safety, function and aesthetics

Principle: reflect the desirable patterns on street and in the district

Principle: create meaningful spaces for pedestrians that draw them in

Principle: respect and enhance the village environment

Patterns for Streetscape

- Appropriate planting intervals for street trees from a minimum of 30' to a maximum of 50' on center.
- Provide for proposed and existing streetscape plans and sections for dimensional guidelines (see Manchester Park & Walk plan)
- Identify best streetscape patterns in each district and reflect or reference in new design being proposed.
- Rely on the integration of deciduous trees as street trees to break up expanses and provide shade; see table of recommended street and village trees.
- In commercial districts, accommodate people both sitting and strolling, with suitable walking and sitting surfaces. Provide a variety of seating options, typically 16-20" height.
- Use tree and shrub buffer plantings to screen unwanted elements and soften architecture.
- Consider coordination of private and public utilities to afford suitable tree planting areas and minimize the presence of utilities.

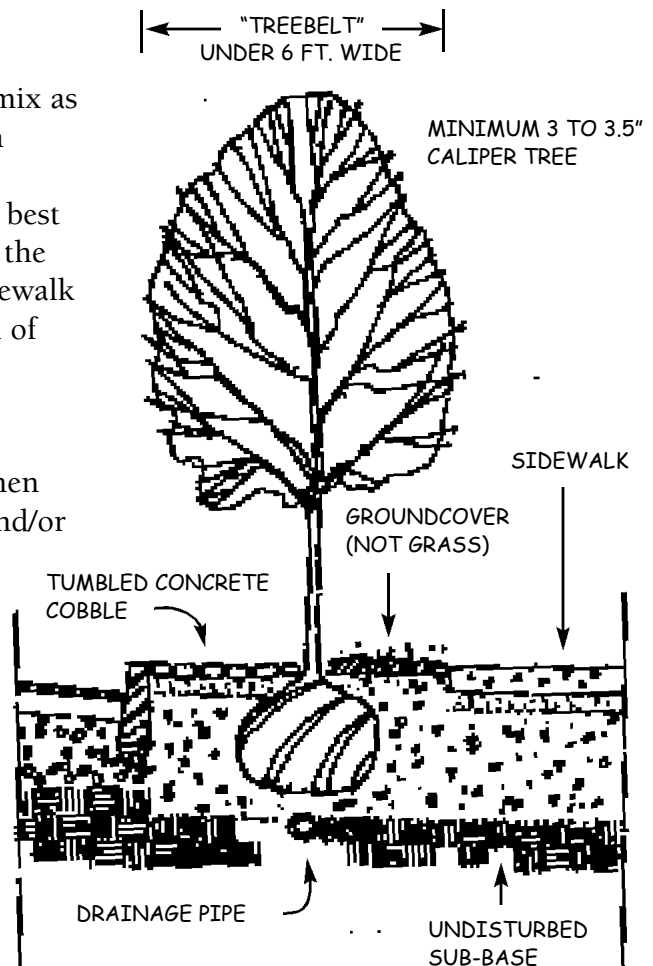
Treebelt Planting

Using Cornell structural soil mix as a supplement in narrow width treebelts is recommended to a minimum depth of 30" and is best applied continuously through the entire span of treebelt and sidewalk to promote health and growth of larger trees.

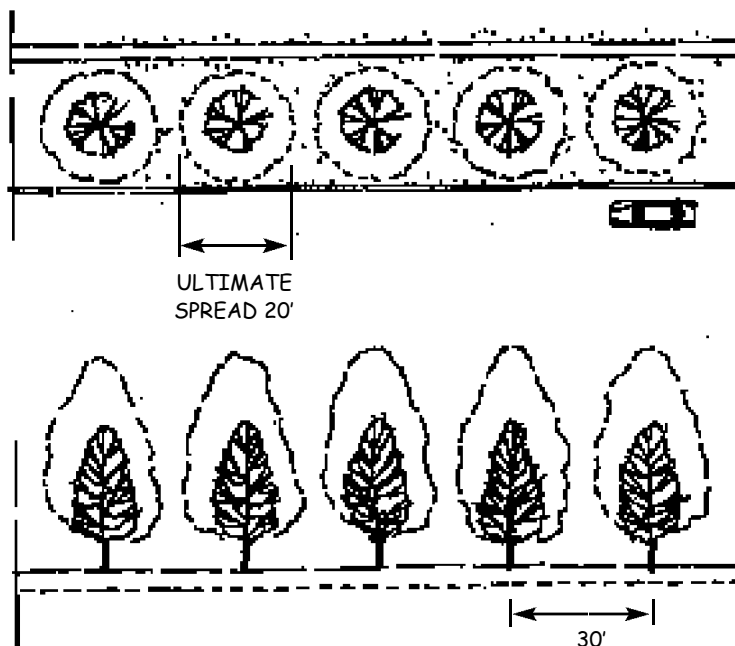
A 4" diameter PVC perforated drainage pipe is to be used when subsoil is highly compacted and/or poorly drained.

Also consider alternatives to grass under trees.

See definition of "structural soil"

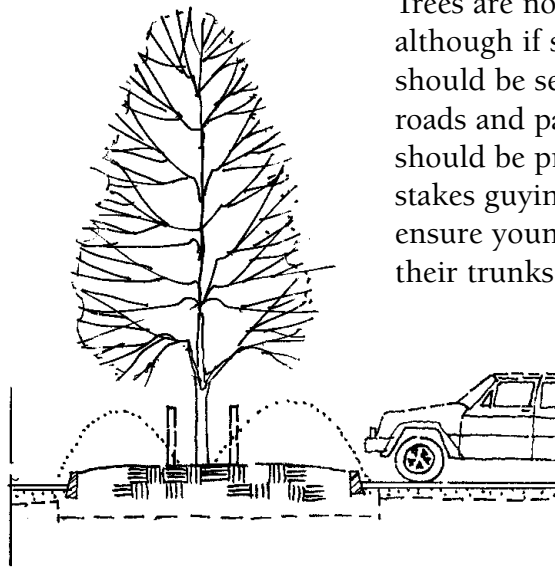


Tree Spacing and Layout



Use regular spacing of trees where possible in architectural settings. Species can be alternated to avoid a monoculture susceptible to disease or damage. Anticipate growth so that when full grown, tree canopies will almost touch. A planting interval of 30 feet on center is usually sufficient.

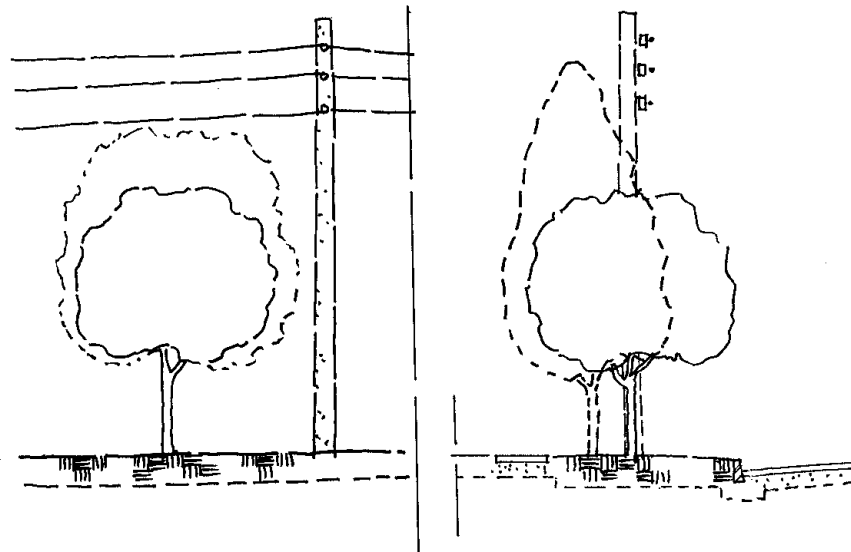
Trees and Snow



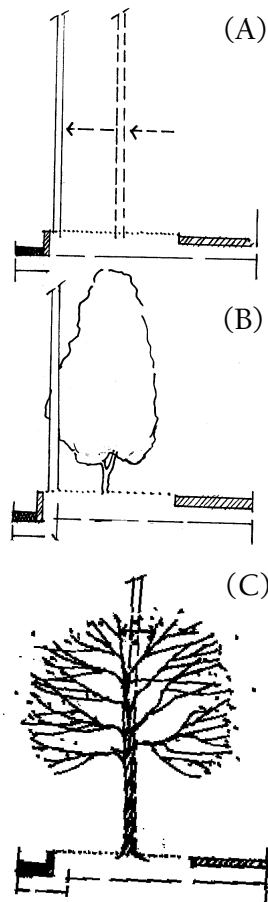
Trees are not negatively impacted by snow piles, although if salt is used, salt tolerant varieties should be selected. Adequate area at edges of roads and parking lots (5' width minimum) should be provided for snow piling. Sturdy stakes guying trees might also be employed to ensure young trees are not pushed over and their trunks damaged.

Planting Under Powerlines

If trees are to be planted under utility lines, specific varieties should be selected which do not exceed the height of the lowest line when full grown. Larger trees can be planted if they are offset from the utility lines.



Trees and Utility Lines



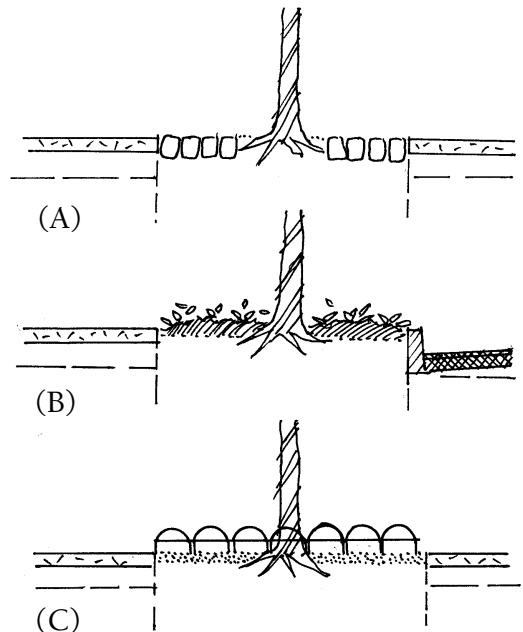
When burial is not an option, moving poles to curbside (A) creates a planting area for a tree with large, oval-shaped canopy (B). Some trees, such as Kentucky Coffeetrees and Honeylocusts, have open habits which allows branching in the upper canopy to co-exist with utility lines (C).

See also: *Street and Village Trees for Manchester* for a listing of appropriate trees

Treatment of Treebelts and Islands

Some different ways to treat islands and treebelts are (A) cobble surround, (B) groundcover, and (C) low decorative fencing with bark mulch, gravel, or groundcover.

Plantings in islands or streetside treebelts should avoid placement atop underground utilities wherever possible. Root retardant products are available to restrict root systems from affecting waterlines and sewerlines.



Street and Village Trees for Manchester

Botanical Name	Common Name	Minimum Recommended Growing Area	Salt Tolerance	Recommended Usage
Large Trees- Greater than 50' in height				
<i>Acer rubrum</i>	Red Maple 'Armstrong'	10'x10'	M	For areas unrestricted by overhead utilities; in parking lots; tolerates wetness
<i>Fraxinus pennsylvanica</i>	Green ash	10'x10'	M	For areas unrestricted by overhead utilities; very hardy tolerant tree
<i>Gleditsia triacanthos</i>	Honey Locust	10'x10'	T	Can be pruned around overhead utilities
<i>Quercus rubrum</i>	Red Oak	10'x10'	M	For areas unrestricted by overhead utilities
<i>Quercus palustris</i>	Pin Oak	10'x10'	T	Has low branching habit
<i>Zelkova serrata</i>	Japanese Zelkova	10'x10'	T	For areas unrestricted by overhead utilities
<i>Tilia cordata</i>	Littleleaf Linden	10'x10'	T	For areas unrestricted by overhead utilities
<i>Gymnocladus dioica</i>	Kentucky Coffeetree	10'x10'	T	Can be pruned around overhead utilities
Botanical Name	Common Name	Minimum Recommended Growing Area	Salt Tolerance	Recommended Usage
Columnar Trees- less than 25' in crown diameter				
<i>Acer x freemanii</i>	Freeman Maple	8'x8'	T	For narrow areas i.e.: close to a building or in an island
<i>Fraxinus pennsylvanica</i>	Green Ash 'Empire'	8'x8'	T	For narrow areas i.e.: close to a building
<i>Ginkgo biloba</i>	Ginkgo	8'x8'	T	For narrow areas i.e.: close to a building. Select seedless variety only.
<i>Prunus sargentii</i>	Sargent Cherry 'Columbiana'	8'x8'	M	For narrow areas i.e.: close to a building
<i>Quercus robur</i>	English Oak	8'x8'	T	For narrow areas i.e.: close to a building

Street and Village Trees for Manchester (Con't.)

Botanical Name	Common Name	Minimum Necessary Growing Area	Salt Tolerance	Recommended Usage
Small Trees — less than 28' in height				
<i>Acer tataricum</i>	Tatarian Maple * also <i>A. ginnale</i>	6'-8'	M	For areas constricted by overhead wiring or where small trees are desirable
<i>Carpinus caroliniana</i>	American Hornbeam	6'-8'	M	For areas constricted by overhead wiring
<i>Ostrya crugata</i>	Thornless Cockspur	6'-8'	M	For areas constricted by overhead wiring
<i>Malus spp.</i>	Crabapple	6'-8'	T	For areas constricted by overhead wiring or where ornamental effect is desired
<i>Pyrus calleryana</i>	Callery Pear *	6'-8'	M	For areas constricted by overhead wiring
<i>Prunus maackii</i>	Amur Chokeberry	6'-8'	M	For areas constricted by overhead wiring
<i>Syringa reticulata</i>	Japanese Tree Lilac *	6'-8'	T	For areas constricted by overhead wiring

Notes:

1. Refer to: Landscape Plants for Vermont for acceptable cultivars and more detailed information.

2. * These trees will often grow well in areas where limited soils exist.

M = moderate tolerance, depending upon cultivar

T = tolerant

SIGN DESIGN

Principle: Signs should fit within and enhance the context and character of a district

Principle: Signs should provide effective communication and guidance

Principle: Signs should be lit evenly and clearly, and without glare or light pollution

Patterns for Sign Design

- Use of appropriate materials such as wood and metals is desirable in sign design and construction.
- Avoid creating light pollution with light fixtures. Shielded and directed lighting is recommended.
- Incorporate appropriate lighting options. Downlighting is preferred.
- Signs should be the proper size in proportion to the building and site.
- Employ contrast and clarity in sign design; reflect the architecture, history or use of the site in the design.
- There is a fine line between too much vs. too little embellishment on a sign face. Simpler signs with only the minimum necessary amount of information are easier to read and more effective.
- Use a hierarchy of information to include a main sign that identifies the complex as the destination, with individual stores identified on their building fronts as well as in an outdoor directory.

Refer to the Manchester Sign Ordinance for current rules regarding signs.

see also: Integrated Signs

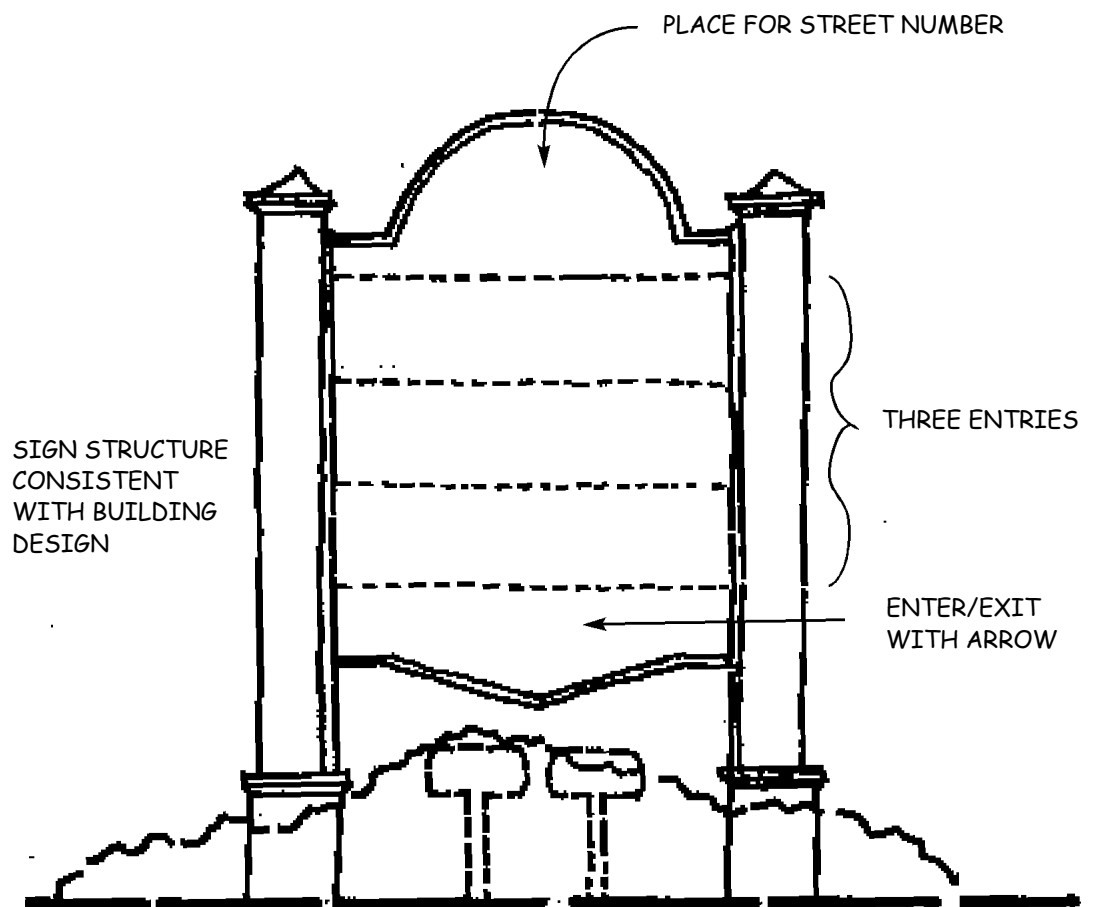
Sign Guidelines

A maximum of three or four entries is recommended. More than four entries creates a busy, hard-to-read sign and are more difficult for motorists to read safely. When this is not sufficient, it is recommended that one sign with the overall development or complex name be used on the street as the destination. This is in keeping with the accepted principles of wayfinding.

Screen lighting fixtures at the base of sign structure.

Incorporate street number and "enter" or "exit" into signboard to eliminate additional signs and sign clutter.

see definition of "wayfinding"



LANDSCAPING

Principle: Employ ecological design methods to include the use of a diversity of plant materials that provide habitat for wildlife. (see also: Bio-Retention)

Principle: Design spaces that are aesthetically pleasing throughout the seasons and serve the function for which they are intended

Principle: Provide adequate screening and buffers where appropriate

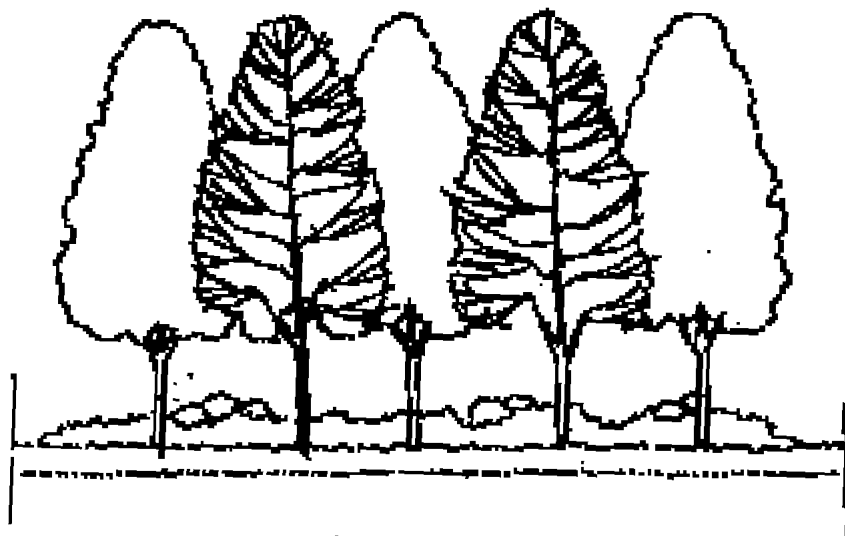
Principle: Design for energy conservation and environmental comfort

Patterns for Landscaping

- Use native or naturalized species with proven performance and hardiness.
- Employ local technologies for installation and management.
- Maintain and enhance views of the surrounding and distant landscape.
- Consider functional landscaping: employ design techniques that stabilize slopes, provide low maintenance alternatives to lawn areas, reduce erosion and reinforce pedestrian circulation routes.

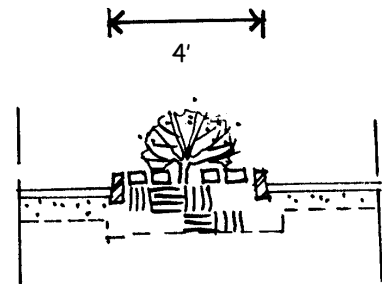
Creating an Appropriate Environment for Plants

Wherever possible and/or appropriate, trees should be planted in groupings for better health, function and aesthetic value. Underplantings of groundcovers, flowering and evergreen shrubs are recommended rather than grass or mulch. This approach will increase the health and longevity of the plant materials, and reduce long term maintenance costs.

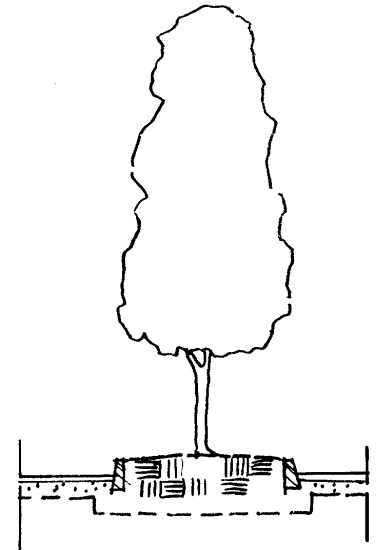


Planting in Islands

In islands that are 4' in width or less, hardy, sturdy shrubs or perennials such as native rose bushes or daylilies can be planted in a cobble surround. These varieties can withstand drought and snow piles.



The recommended minimum island width for tree planting is 6'. In this type of planting island a columnar tree is recommended.

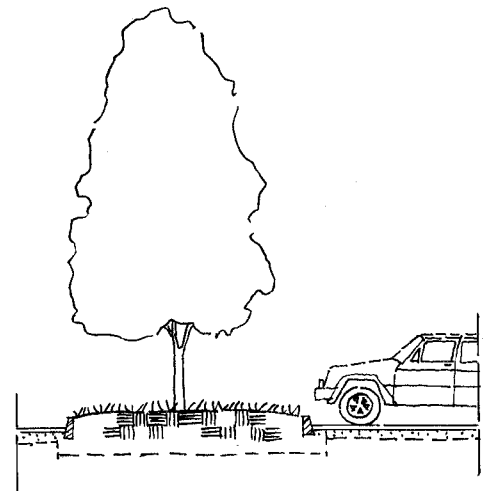


A minimum 10-12' island is recommended for successful establishment of larger scale landscape trees. Larger trees will more effectively shade asphalt lots, prolonging the life of the asphalt and reducing heat levels in summer.

10 - 12'

The island needs to be wider if a pedestrian walk of 5' width minimum is to be incorporated.

see also: Treebelt Planting and Treatment of Islands and Treebelts

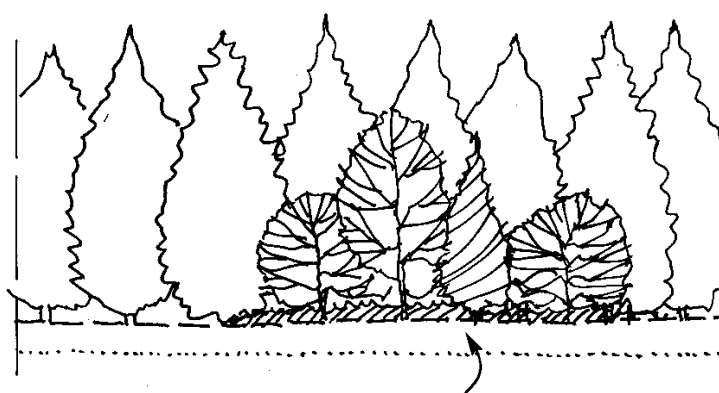


Living Fences

Living fences are typically linear hedges or buffer plantings. Columnar or pyramidal varieties of evergreens lend themselves well to this use, as they provide color and screening year round.

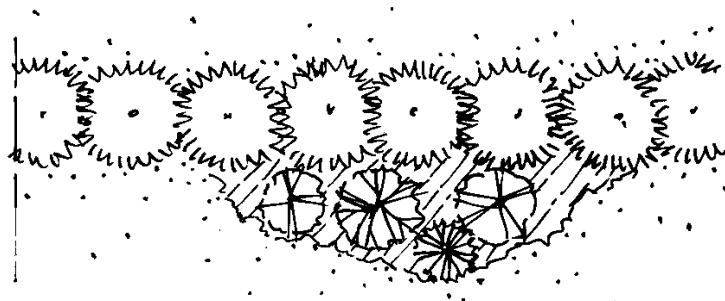
Vines such as Honeysuckle, Virginia Creeper, Silverfleece or Wintercreeper can be grown on wood or metal fencing as another alternative to creating a “living fence” which provides screening.

The formality of screen trees planted in a row can be softened by planting deciduous and evergreen accent trees in front of and as part of the hedge. This approach will break up the continuous line of trees.



ELEVATION

ACCENT PLANTING FEATURE SET OFF
BY EVERGREEN BACKGROUND

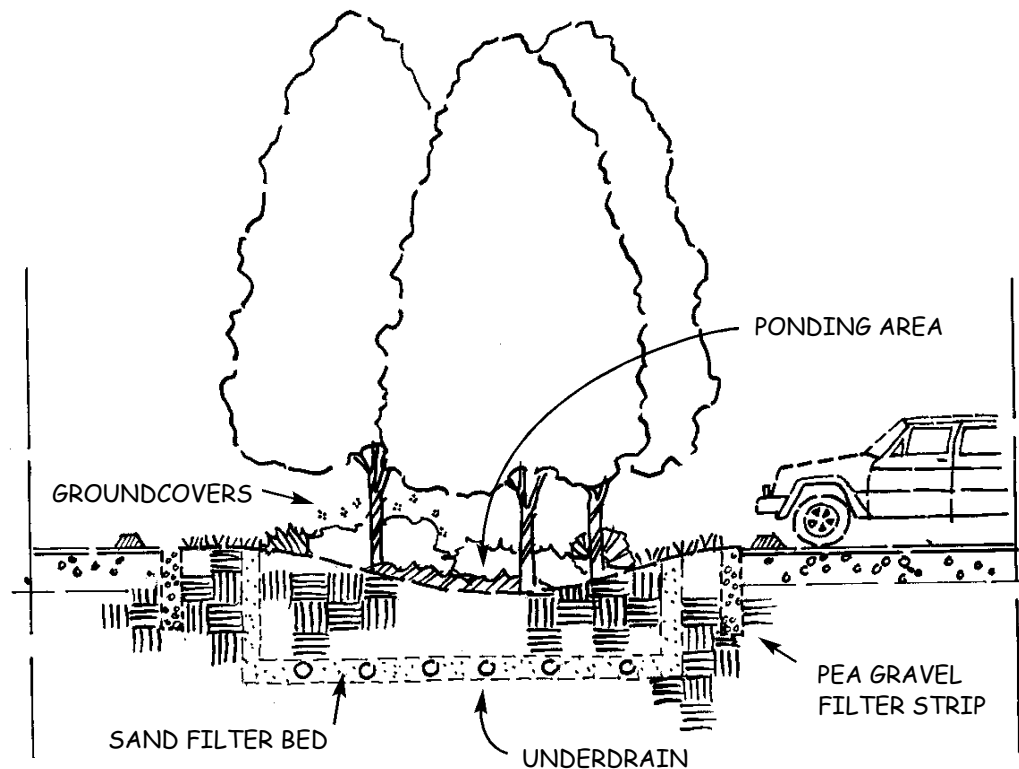


PLAN VIEW

Bio-Retention

Bio-retention areas in parking lots and development sites offer an example of “Ecological Design” which treats stormwater runoff in a natural manner by detaining it and filtering it as it percolates through plantings and sand filter beds. The more intensive planting approach also offers a viable strategy for beautifying parking lots, attracting birds and screening the parked cars.

Native and naturalized materials are recommended for groundcovers and plantings as part of the bio-retention strategy.

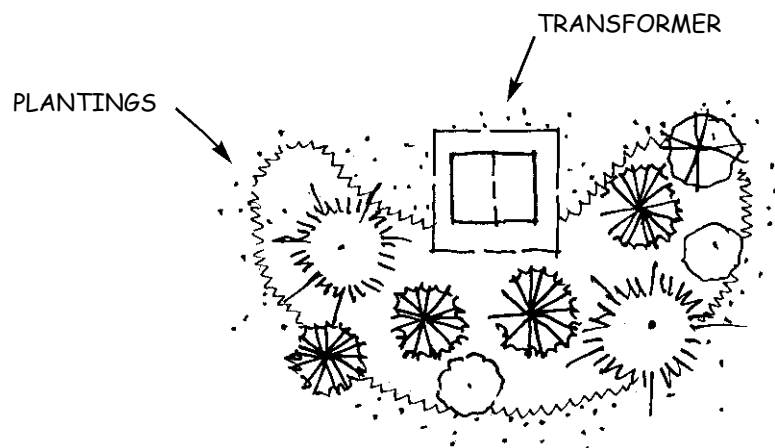
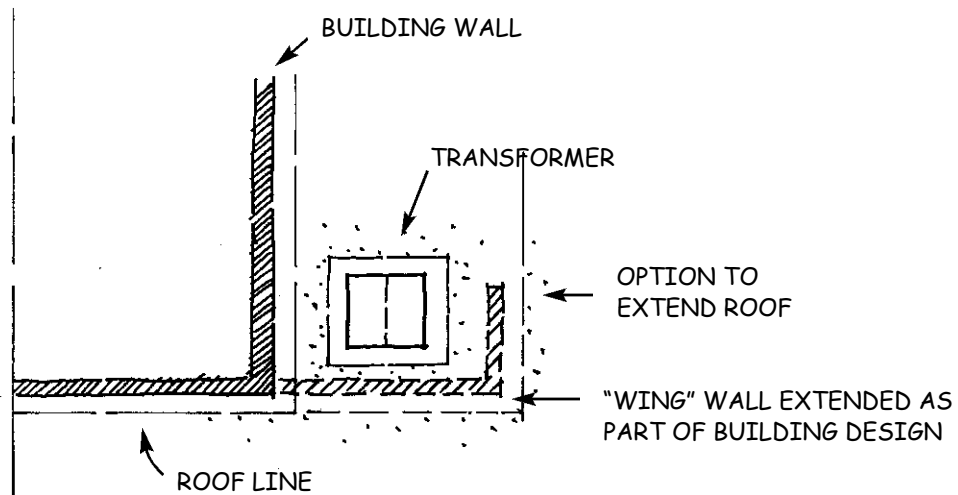


see definition of “ponding area”

Screening

Screening transformers and other utilities can be accomplished in a more creative fashion that calls less attention to the element being screened. Two options include 1) incorporating the screening element into the architectural design of the building or utility buildings on the site or 2) setting the transformer or other such utility within a proposed planting bed rather than creating a rectilinear planting around the transformer designed specifically to screen it.

PLAN VIEWS



SITE FURNITURE

Principle: Reflect neighborhood/downtown/site character and context

Patterns for Site Furniture

- Provide for appropriate placement of site furniture, where people will use it.
- Locate site furniture with security in mind and install in a method which withstands weather and abuse.
- Consider aesthetics – use the right products that fit with the design motif of the project or setting.
- Consider accessibility and universal design applications.
- Use appropriate materials for durability and contextual relationship.
- Details and design are to be guided by the proposed architectural and/or landscape designs.

see definition of “universal design”

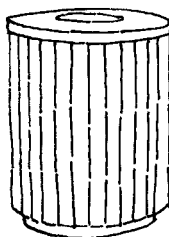
Benches and Garbage Cans

Where possible, a family of site furniture of similar historic styles prevalent in Manchester should be used. Use sturdy, well-designed site furniture; a wide variety of decorative styles with durable, appropriate materials are available. Consider wood slats; they are not too hot, and not too cold to sit on.

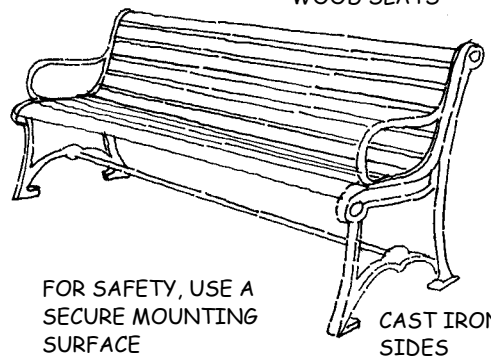
Color and design in site furniture will help unify a project site. A range of colors are available.

METAL TOP LIFTS
OFF TO EMPTY

WOOD OR
METAL SLATS



WOOD SLATS

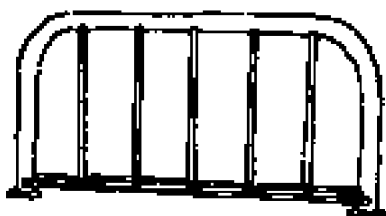


FOR SAFETY, USE A
SECURE MOUNTING
SURFACE

CAST IRON
SIDES

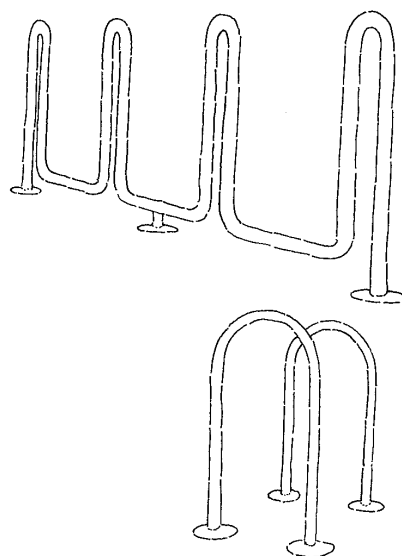
Bikeracks

Two types of bicycle racks are shown. Coated metal racks are available in a range of colors, and will not check or warp like wood racks. These metal racks can be surface mounted on concrete or installed by direct burial of longer support posts. Another option is the low profile bike rack as manufactured by Bike Track, Inc. of Woodstock, Vermont.

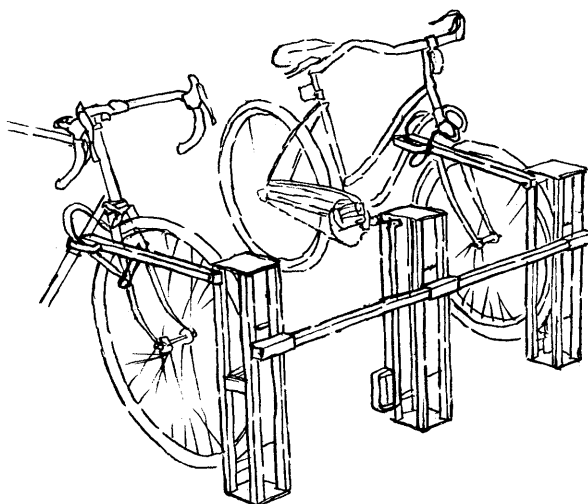


This simple style of rack can be used for tight spaces as it accommodates bicycles both sideways and perpendicular to the rack.

The “Bike Rib” series from Function First Bike Security, in Tuscon, Arizona (888-BIKERIB) offers 2 designs with powder-coated or thermo plastic finishes to protect bikes.



The rack pictured below provides stability and security for bicycles and is available through Bike Track, Inc., of Woodstock, Vermont.



GLOSSARY

The following terms appear in the preceding Patterns for Buildings and Site and can be helpful when discussing architecture, landscaping and site development.

Cut-off luminaire A luminaire is a complete lighting fixture including the lamp (or bulb), the lens and reflectors (which direct and distribute light), the socket and the wiring. A cut-off fixture directs light only where it is needed, and prevents undesirable glare, scatter, or light pollution.

Desire Lines Used to describe the routes pedestrians prefer to take when traveling from point to point. Sidewalks do not always match where pedestrians desire to walk.

Elevation A drawing of the face of a building which shows no perspective effects. This type of drawing is simple to prepare and flat features are easily measured to determine scale. Also a name for the building facade itself.

Foot candle A measure of light falling on a surface. One foot candle is equal to the amount of light generated by one candle shining on a square foot of surface area one foot away. For example, full moonlight provides an illumination level of up to 0.1 footcandle, whereas a windowed room on a cloudy day would be illuminated in the range of 6-8 footcandles. (*from Outdoor Lighting Manual for Vermont Municipalities*)

Ground plane Refers to the topography or land surface at the ground level.

Infrastructure A term used to describe the physical systems of transportation, utilities and communications (such as roads, parking lots, HVAC units, dumpsters, telephone poles) which are necessary to serve buildings, institutions and communities.

Massing (*noun*) How the principle forms of a building are sized, shaped, grouped together, or arranged on a site. In the design process, one can think of walled and roofed shapes as building-blocks (masses) which may be dispersed in order to break up the apparent total volume of enclosed space, or combined to create a single larger mass. For example, "this building has irregular massing," or "the massing of this group of buildings is appropriate for its neighborhood."

Parapet The highest part of the exterior wall of a building which is apparently flat-roofed. The parapet hides rooftop equipment and the roof surface which slopes gently to a drainage point. (See Architectural Pattern: Roof Shapes)

Rake The inverted "V" shaped edge of a typical gable roof seen when one looks at the peaked exterior wall. The rake usually has the same profile as the eave. (See Architectural Pattern: Wooden Trim for components)

Soffit Any solid horizontal surface created by an overhang, whether indoors or outdoors.

Specimen tree A term used in the landscape industry to refer to an outstanding individual mature tree or a large tree to be planted which will serve as a focal point for an outdoor space.

Transom A small window located immediately above a door or conventionally-sized window. A transom window is always the same width as the door or window below it.

Uniformity ratio This is a ratio used in determining the relationship of lighting levels. It refers to the ratio of average illumination to minimum illumination on a surface. A 4:1 uniformity ratio thus indicates the average illumination is four times brighter than the minimum illumination provided by an outdoor lighting installation.

Wayfinding A systematic approach to guiding people through an environment to their destination, using signs, maps, landmarks and other means. It literally means finding one's way from place to place.

References and Suggested Further Reading:

Alexander, Ishikawa, Silverstein, A Pattern Language, copyright 1967, Oxford Univ. Press

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Carley, Rachel, The Visual Dictionary of American Domestic Architecture, reprint copyright 1997, Henry Holt (paper)

Duany, Andres, and Plater-Zyberk, Elizabeth, Towns and Town-Making Principles, copyright 1991, Harvard Univ. Graduate School of Design

Fleming, John, Penguin Dictionary of Architecture, copyright 1991, Penguin USA

Hale, Jonathan, The Old Way of Seeing, paperback copyright 1995, Houghton Mifflin Co.

Kunstler, James Howard, The Geography of Nowhere, copyright 1994, Touchstone Books

McAlester, Virginia and Lee, A Field Guide to American Houses, copyright 1989, Alfred A. Knopf

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Chittenden County Regional Planning Commission, Outdoor Lighting Manual for Vermont Municipalities. Essex Junction, VT 05453, May 1996.

Duerksen, Christopher J. & Richman, Suzanne, Tree Conservation Ordinances. American Planning Association and Scenic America, Chicago, IL, 1993.

Fleming, Ronald Lee, Saving Face: How Corporate Franchise Design Can Respect Community Identity. American Planning Association, Chicago, IL, and the Townscape Institute, Cambridge, MA, 1994.

Heriteau, Jaqueline & Cathey, Dr. H. Marc. The National Arboretum Book of Outstanding Garden Plants. Simon and Schuster, NY, NY, 1990.

Landscape Plants for Vermont. The Extension Service, University of Vermont, 1966.

Illumination Engineering Society of North America. Lighting Handbook: Reference and Application, 8th ed. (Edited by M.S. Rea, New York: Illumination Engineering Society of North America, 1993)

Williams Jr., Norman & Kellogg, Edmund H. & Lavigne, Peter M.. Vermont Townscapes. Center for Urban Policy Research, New Brunswick, NJ, 1987.

Submitting an Application for Design Review

Proposals should be illustrated to a degree that gives the reviewing Boards a thorough understanding of the project. The quantity and type of drawings or other information needed will vary with the nature and extent of the project. For example, a more thorough application packet will be needed for a new building in a historic district, or a facade renovation on a historic building, as compared with a proposal for rear deck on a newer building located off the street. The checklist below is a guideline to help inform a prospective applicant as to what may be needed in a design application; Town Boards may request additional information as needed to fully understand any particular project. Town staff are happy to provide guidance and answer questions as to what may be needed in any particular instance.

Helpful or required information may include:

Building design

- Narrative explaining the scope of work proposed.
- Accurate, detailed drawings or photographs showing existing conditions of the building.
- Accurate, detailed scale elevations illustrating the proposed construction or alteration. Elevations should include neighboring buildings, proposed signs, light fixtures, and landscaping. In minor cases, a sketch superimposed over a photograph may suffice. In other cases (such as for new buildings or other significant proposals), digital imagery may prove helpful in visualizing proposals. Perspective drawings may also be needed -- for example, of a principal facade as seen from pedestrian eye level.
- Accurate detailed scale drawings of site development plan. (Residential uses need a sketch plan).
- Samples, specifications, cut sheets, photos of all materials, i.e.: roofing material, doors, window/muntin specs, siding, site furniture, handrails, fencing, brick, etc.
- Additional drawing(s) or sections of details for trim and finish work.
- Accurate and sufficient samples of paint chips for primary and trim colors.
- Manufacturer's cut sheet or specifications and locations for all HVAC units and other infrastructure

Lighting

- Show numbers & locations of proposed light fixtures on a site development plan.
- Provide manufacturer's cut sheets for all fixture(s) and/or pole(s); photos if available; specify colors.
- Specify types of bulbs and size/intensity for each type of fixture.
- Accurate, scale drawings or photographs of building elevations for wall-mounted lights.

Awnings

- Photo or brochure showing proposed design.
- Color sample or swatch of proposed material.
- Photograph or accurate scale drawing of building, showing where awning is to be installed.

Landscaping

- Accurate, detailed scale drawing of site plan showing location, number, and types, and sizes of proposed plantings or other site improvements, including fences, screening, benches, and the like.

Signs

- Color rendering of proposed sign, or photograph if already existing.
- Material specifications; accurate and sufficient samples of each proposed color.
- Photograph or accurate scale drawing of building elevation showing proposed location(s) of flush mounted or projecting sign(s),
and/or
- Photograph or accurate scale drawing of site plan showing proposed location of freestanding sign.
- Type & location of all lighting fixtures & bulbs that illuminate sign.

With a complete submittal in hand, Town Boards can more fully understand the scope of a proposed project. This will help the review process go more smoothly for all parties.